

# MARINE RECORD

ESTABLISHED 1878.

VOL. XXI, No. 52.

CLEVELAND---DECEMBER 29, 1898---CHICAGO.

\$2.00 Per Year. 5c. Single Copy

## LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

### PRESIDENT.

JAMES S. DUNHAM, Chicago

### VICE PRESIDENTS.

H. A. Hawgood, Cleveland	Leander Burdick, Toledo
David Vance, Milwaukee	M. J. Cummings, Oswego
C. W. Elphicke, Chicago	Alvin Neal, Port Huron
A. A. Parker, Detroit	James McBrier, Erie
G. L. Douglas, Buffalo	J. H. Westbrook, Ogdensburg
G. A. Tomlinson, Duluth	F. W. Gilchrist, Alpena
Chas. A. Eddy, Bay City	G. E. Tener, Fairport
F. J. Firth, Philadelphia	

### SECRETARY.

CHARLES H. KEEP, Buffalo

### TREASURER.

GEORGE P. MCKAY, Cleveland

### COUNSEL.

HARVEY D. GOULDER, Cleveland

### COMMITTEE ON LEGISLATION.

G. L. Douglas, Buffalo	Wm. Livingstone, Detroit
E. T. Evans, Buffalo	C. A. Eddy, Bay City
P. P. Miller, Buffalo	Alex. McDougall, West Superior
H. C. French, Buffalo	F. J. Firth, Philadelphia
Charles Paine, Buffalo	Jas. E. Davidson, West Bay City
Edward Smith, Buffalo	D. Sullivan, Chicago
L. C. Hanna, Cleveland	W. E. Fitzgerald, Milwaukee
James Corrigan, Cleveland	

### COMMITTEE ON AIDS TO NAVIGATION.

George P. McKay, Cleveland	W. M. Egan, Chicago
W. H. Becker, Cleveland	W. A. Livingstone, Detroit
John W. Moore, Cleveland	J. H. Westbrook, Ogdensburg
W. A. Hawgood, Cleveland	A. W. Colton, Toledo
Thos. Wilson, Cleveland	James Davidson, West Bay City
C. E. Benham, Cleveland	Alvin Neal, Port Huron
H. Coulby, Cleveland	M. M. Drake, Buffalo
J. G. Keith, Chicago	W. W. Smith, Sault Ste Marie

## SOME LARGE LAKE FLEETS

The Bessemer Steamship Company, Cleveland, leads the entire lake owned fleets in point of tonnage and valuation. Figures submitted to Congress last week in support of a measure to deny wrecked foreign-built vessels an American registry with permission to participate in the coastwise, passenger or cargo trade, show that there is owned by the Bessemer Line 65,000 tons of vessel property having a valuation of \$4,000,000 or a ton value of \$61.54. The next largest fleet is that of the American Steel Barge Company (whale-backs), with a tonnage of 40,000, valued at \$3,000,000, showing the ton value to be \$75. The Minnesota Steamship Company (Pickands, Mather & Co.), who are also the Cleveland managers for the whaleback fleet, comes next in point of tonnage with a fleet of 36,000 tons valued at \$2,700,000 or at the rate of \$61.11 per ton. A. B. Wolvin, managing owner, Duluth, handles a fleet of 25,000 tons, valued at \$2,000,000, showing a mean valuation of exactly \$80 per ton on all the floating property. The Erie & Western Transportation, of Buffalo, comes next with 24,097 tons valued at \$1,900,000, showing a mean of about \$70 per ton for the fleet. Parker & Millen, Detroit, are quoted as owning 17,938 tons with a valuation of \$98 per ton. A portion of this fleet includes valuable salvage and wrecking equipment, passenger steamers, etc., hence the higher rate of valuation per ton. On the other hand, Capt. James Davidson, whose craft of 30,250 tons are exclusively wooden vessels, is valued at \$1,250,000 or a mean tonnage rate of only \$41.32 per ton. The Menominee Transportation Company, with a tonnage of 15,500, valued at \$1,000,000, shows a rate of \$65 per ton for a fleet of high classed steel cargo steamers, and this rate it will be noticed almost coincides with the value per ton placed on the Bessemer line, also the Minnesota Steamship Company's fleet, the highest valuation being given to the Wolvin line at Duluth, viz., \$80.

The principal lake passenger lines can be quoted as follows: Detroit & Cleveland Navigation Company, 8,431 tons, valued at \$1,150,000 or at the rate of \$136 per ton. The Goodrich Line, Chicago, 8,996 tons at \$1,000,000, equal to \$111.17 per ton; and the Lake Michigan & Lake Superior

Transportation Company, Chicago, with 7,380 tons at a total valuation of \$450,000 or \$61 per ton. Ten steamship lines in the coast trade out of New York City have an aggregate tonnage of 232,508 with a value of \$30,000,000 or \$129 per ton. These include all the old established cargo and passenger lines.

Among 42 vessel owning firms at the several lake ports are two or three others holding floating property valued at \$1,000,000 and so on down, but, in taking the list of 42 owners we find an aggregate tonnage of 701,160 valued at \$42,420,000, showing a mean tonnage valuation of \$60.50 per ton, or a mean of upwards of a million dollars worth of floating property awarded to each fleet contained in the forty-two which we selected.

## REPORT OF FREIGHT AND PASSENGER TRAFFIC

TO AND FROM LAKE SUPERIOR FOR THE SEASON OF 1898, INCLUDING STATISTICS OF THE UNITED STATES

AND CANADIAN CANALS AT SAULT STE.

MARIE, MICHIGAN AND ONTARIO.

ITEMS.	TOTAL SEASON'S FREIGHT, 1898.		
	U. S. Canal.	Can. Canal	Total.
Vessels, number.....	14,058	3,703	17,761
Lockages, number.....	7,008	2,525	9,533
Tonnage, registered, net tons.....	15,871,609	2,751,145	18,622,754
Tonnage, freight, net tons.....	18,184,151	3,050,533	21,234,684
Passengers, number.....	27,558	15,868	43,426
Coal (hard), net tons.....	465,188	75,655	540,843
Coal (soft), net tons.....	2,669,904	565,703	3,235,607
Flour, barrels.....	6,917,025	861,018	7,778,043
Wheat, bushels.....	52,693,452	9,646,544	62,339,996
Grain (other than wheat), bushels.....	22,950,940	3,127,444	26,078,384
Manufactured and pig iron, net tons.....	237,150	13,020	250,170
Salt, barrels.....	271,783	29,777	301,560
Copper, net tons.....	118,403	5,823	124,226
Iron ore, net tons.....	9,811,124	1,865,836	11,706,960
Lumber, M. ft. B. M.....	885,176	10,309	895,485
Silver ore, net tons.....	.....	.....	.....
Building stone, net tons.....	4,670	.....	4,670
Unclassified freight, net tons.....	544,259	78,887	623,146

## COMPARATIVE STATEMENT OF FREIGHT AND PASSENGER TRAFFIC TO AND FROM LAKE SUPERIOR FOR THE SEASONS OF 1897 AND 1898.

ITEMS.	SEASONS.		Increase Per cent.	Decrease Per cent.
	1897.	1898.		
Vessels "A." number.....	17,171	17,761	3	.....
Lockages, number.....	8,571	9,533	11	.....
Tonnage, registered, net tons.....	17,619,933	18,622,754	6	.....
Tonnage, freight, net tons.....	18,982,755	21,234,684	12	.....
Passengers, number.....	40,213	43,426	8	.....
Coal (hard), net tons.....	536,199	540,843	1	.....
Coal (soft), net tons.....	2,502,973	3,235,607	29	.....
Flour, barrels.....	8,911,143	7,778,043	13	.....
Wheat, bushels.....	55,924,302	62,339,996	11	.....
Grain (other than wheat), bushels.....	24,889,688	26,078,384	5	.....
Manufactured and pig iron, net tons.....	135,164	250,170	85	.....
Salt, barrels.....	285,449	301,560	6	.....
Copper, net tons.....	122,324	124,226	2	.....
Iron ore, net tons.....	10,613,715	11,706,960	10	.....
Lumber, M. ft. B. M.....	805,612	895,485	11	.....
Silver ore, net tons.....	5	.....	.....	100
Building stone, net tons.....	6,249	4,670	25	.....
Unclassified freight "B." net tons.....	579,048	623,146	8	.....

NOTE "A"—Steamers.....12,461  
Sails.....4,449  
Unregistered.....851  
Total.....17,761

NOTE "B"—Included in the item of unclassified freight is 2,601 tons of wool.

The above comparison includes the traffic through the Canadian Sault Ste. Marie canal.

United States canal was open to commerce from April 21 to December 10, 1897, 234 days. In 1898 it was open from April 18 to December 14, 241 days.

The Canadian canal was open to commerce from April 21 to December 14, 1897, 238 days. In 1898 it was open from April 11 to December 9, 243 days.

Commerce passed through canals 238 days during 1897.

Commerce passed through canals 248 days during 1898.

## A DIFFERENCE IN VALUES.

Fairplay, London, appears to delight in getting back at the Prime-McCurdy syndicate of underwriters, Chicago. Hardly an issue of that journal goes to press without there being something in its notes derogatory to the above-named combination of interests. In its issue of December 15, Fairplay takes a whang at the "Master's Manual," issued last year, as follows: "The Manual seems to have had very little effect on the dangers which pervade the navigation of the lakes. Storms that cannot be evaded and human error which cannot be controlled will always be the main factors in producing marine risks. So far as captains are concerned, Mr. McCurdy may take it that those gentlemen will not get wrecked if they can help it; while as to owners, the underwriters' cheque is always regarded as a sweet solatium when the number of their fleet has been diminished, and I fear it always will be impossible to persuade an individual owner that the cheque comes out of his own pocket."

Now, Mr. McCurdy and the editor of Fairplay can fight it out on the lines of the best method of conducting an underwriting business to their heart's content. We only know Mr. George McCurdy as being one of the best underwriters in the United States; regarding his mode of doing business, which is generally successful, we have nothing to offer at this time. However, Fairplay goes on to quote casualties and values on lake tonnage, as follows:

"No less than five more casualties to lake steamers have to be recorded. The Hiram W. Sibley stranded on the north of Fox Island and broke up in the gale of the 27th of November. The hull was valued at \$24,000; she had a cargo of 70,000 bushels of corn. The St. Lawrence, hull valued at \$25,000, and with 80,000 bushels of corn, went ashore at Point Betsey, Lake Michigan—she was got off and has again stranded. The Fayette Brown, 2,081 tons gross register, valued at \$26,000, is ashore at Point Pelee. The George B. Owen, valued at \$6,000, is ashore at Ashtabula. The Harlem, 2,292 tons gross register, valued at \$21,000, and insured with London companies and at Lloyds, lies stranded on rocks in Lake Superior."

In the connection of values, Fairplay seems to be worse than at loggerheads with practice and custom on the lakes. For instance, the wooden steamer Sibley is placed at a much higher valuation than the large steel steamer Harlem. The Inland Lloyds rate the Sibley for insurance purposes at \$15,000. Fairplay quotes her at \$24,000, which is well along to double her lake rating. The Harlem is given a lake value of \$33,000 and a London valuation of \$21,000. According to lake practice the Harlem exceeded double the value of the Sibley and \$15,000 over, but the figures from Fairplay quote her as being worth \$45,000 less. The wooden steamer St. Lawrence is quoted at \$70,000 in Inland Lloyds. London gives her a value of \$125,000, or the difference between \$14,000 and \$25,000. The composite-built steamer Fayette Brown has a London valuation of \$130,000, though \$20,000 better is her lake quotation, etc. The difference in values is a conflict of figures which Fairplay would do well to look up when handling casualties regarding lake tonnage.

## ORIGIN OF WEATHER FORECASTS.

It is now stated that the first attempt at scientific forecasting of the weather was the result of a storm, which, during the Crimean war, Nov. 4, 1854, almost destroyed the fleets of France and England. As a great storm had raged several days earlier in France, Valiant, the French minister of war, directed that investigations be made to see if the two storms were the same, and if the progress of the disturbances could have been foretold. It was then demonstrated that the two were in reality one storm, and that its path could have been ascertained and the fleet forewarned in ample time for them to reach a port of safety.



## NEWS AROUND THE LAKES.

## CLEVELAND.

*Special Correspondence to The Marine Record.*

The Mutual line steamer Corsica will go to Ashtabula this week to lay up for the winter. The Corona also winters there.

Capt. John Babbitt, of the steamer Devereaux, chartered a consort this week named Miss Carrie Louise Wood. The contract, by mutual agreement, is continuous.

What with being out of town and sickness quite a number of owners and brokers have been conspicuous by their absence from their desks this week. The gripe is a holy terror.

Mr. H. Coulby, manager of the Minnesota Steamship Co., will meet with a committee in a few days and audit the bills of the release and ice breaking expedition incurred during the last week of navigation.

The steel steamer E. C. Pope, still occupies the lower dock of the Ship Owners Dry Docks, the Choctaw is in No. 1, receiving repairs to bottom damage and the Kersarge is in No. 2 dock, having 25 plates faired, re-rolled and renewed, under the supervision of Mr. Curr, representing the owners.

It seems quite certain that if the present firms doing marine insurance business attempt to squeeze vessel owners any more than they have done, there will be some close skirmishing done to place the insurance elsewhere, that is, speaking of the fleets that will stand close inspection and a proper rating.

The weather forecaster here, Mr. James Kenealy, has certainly been making a full and accurate score in his predictions for the past few weeks. I do not know exactly how the percentage of successful prognostications is reckoned, but whichever way it is kept or fixed, the local indicator must stand high in his forecasts, for he heralds it right all the time.

Shares of stock are being got together this week among local business men to furnish payments on a new hull to be placed in the Welland canal trade. There is quite a sentiment floating around now in favor of a largely increased traffic through the Welland and St. Lawrence system of canals to the Gulf ports when the work on the enlarged lower canals is completed.

There may be nothing in it, and then again there may, but it was talked around this week that the D. & C. line would complete their chain by placing two of their oldest side-wheel boats in the Lake Ontario trade next season. By capturing a good paying passenger route from Mackinac to Ogdensburg, the D. & C. could get in shape for a Lake Superior division and have twin-screw 20-knot propellers.

The many friends of Capt. Geo. P. McKay will be pleased to learn that he is again to windward and devoting a portion of his time to business. At this season of the year especially, the captain as chairman of the committee on aids to navigation of the Lake Carriers' Association is too valuable a man to have laid up, even if only temporarily, and I am glad to know that he is around again so that the masters and pilots can make their reports to him after the experience of the season just closed.

In talking with a leading vessel owner here this week, he stated that the underwriters had taken the cream of his season's earnings to the tune of about \$55,000. That, by the way, is a nice little clean-up for vessels and lake seamen to give the underwriters. Wonder if this lake underwriting business is carried on with as much circumspection and discretion as it should be anyway, or if Peter is not robbed to pay Paul? Judging from two or three interviews I have had this week the insurance companies are taking the vessel owners' bottom dollar these times.

At a meeting of the executive committee of the Lake Carriers' Association, held here a few weeks ago, it was decided to hold the annual meeting of the association the latter part of March, instead of January. Secretary Keep stated that the Buffalo line managers were unable to attend the meeting in January, but that if a later date was fixed the lines would be well represented at the meeting. Although the date was not definitely fixed at the meeting Secretary Keep was instructed to call the meeting about March 22. Local members of the association have been discussing the matter and now consider that March 22 is too late. While January was not satisfactory, as there are too many other meetings in that month, February is now being suggested. As a rule a very large portion of the season's chartering is done in March. Both ore and coal shippers are in the market for tonnage and owners want to be on hand when business is to be done. It is possible that an earlier date than March 22 will eventually be fixed upon.

The Wilson Transit Line has brought a successful season to a close, that is successful, in so far as handling their floating property is concerned, whether there has developed a fair, living share of earnings is quite another question. Capt. Thos. Wilson, manager of the fleet, is a practical man and takes much satisfaction in having all of his vessels laid up in good condition and in snug winter quarters, also, fairly well placed at various points on the lakes readily available to take part in any decent prospects, that is, figures offered for winter storage and spring delivery or for early loading on the opening of navigation. Sounding lightly on net earnings of the fleet for the season, just to see how the captain would take it, and incidentally to secure some informa-

tion on that point for readers of the RECORD, Capt. Wilson remarked that they were building a new boat to stop the drain on finances brought about through the lesser carrying power of some of the smaller craft in the line. He also remarked that it seemed to be a case of nip and tuck all around, that the vessel business was now in such a shape as to require the utmost skill, discretion and economy to keep figures on the right side of the ledger. At the same time the Wilson Transit Line was by no means grumbling, they had worked from early in the spring until late in the fall and the fleet were to-day ready for another siege, so that on the whole, they had not come out of the season's campaign any worse off than their neighbors, and there might be better prospects ahead. The changes in the fleet among masters, engineers and pilots for next season will be more in the line of promotions than anything else. The large new steel steamer Yuma is now at Duluth, the Yukon at Milwaukee, Wallula and Volunteer at Chicago, Sitka, W. D. Rees, D. Z. Norton, Yakima and Olympia at Cleveland, C. Tower, Jr., at Lorain, and the Spokane and Carnegie at Buffalo.

## CHICAGO.

*Special Correspondence to The Marine Record.*

On Monday fire broke out in the cabin of the steamer New Orleans, which is undergoing repairs at the Bates' shipyard. Employees and firemen extinguished the blaze after damage amounting to several hundred dollars had been done.

Two suits growing out of the loss of the steamer City of Duluth at St. Joseph last winter, was begun in the United States District Court last Friday by the Graham and Morton Transportation Co., one claim is against the Chicago Insurance Co. for \$9,500, and the other against the Marine Insurance Co., of London, for \$500, for loss of the cargo of flour on board the steamer.

I noted last week that a prominent marine insurance firm of this city placed the total receipt of premiums for the season at \$2,000,000 and the aggregate claims paid or to be settled at \$3,000,000. Another expression of opinion from an equally reliable source, places the premium receipts on hulls and cargo at \$2,500,000 and the claims for total losses alone at \$2,000,000. It should be stated, though, that underwriters are not giving the key to their business out for publication.

Since the settlement of the difficulties with the Illinois & Michigan canal authorities, the officials of the Sanitary District of Chicago have been looking over the ground with a view of taking every possible opportunity to complete the canal at an early date. From an estimate of the work now in sight the trustees express the belief that the flow of water from Lake Michigan may begin next Chicago Day (October 9, 1899). If found necessary, work at certain points will be carried on at night.

The Buffalo rate on corn, winter storage, and spring delivery, has advanced to 2½ cents, with every prospect of going higher in the near future, as I advised in your issue of the 22nd. It has been ascertained that the available grain-carrying tonnage wintering here does not exceed 4,250,000 bushels, and fully one-seventh of this capacity is already under charter. The steamer Ira H. Owen has been placed at 2½ cents on corn, and the belief prevails that at least one or two more vessels had been taken on the same basis. The vessels chartered last week at 2¼ cents on corn were the Caledonia, Polynesia and Phenix, and the barge placed for oats at 2¾ cents was the Olive Jeannette.

The following is the recent dry dock work at the yards of the Chicago Ship Building Co., steamers, Volunteer, repairs to decks, some outside planking and calking; Queen of the West, bottom calked and other repairs; Iosco, for new shoe; tug Holliday, calking and ironing; steamer Desmond a number of new bottom planks and calked all over, repairs on steamers Thos H. Palmer and Merrimac; the Raleigh, for new wheel and calking; A. A. Parker, for bottom calking and new rudder; Caledonia, calking and stern bearing repaired; Wallula, for new syphon and calking; fire boat Chicago, for some new plank, being damaged by ice; W. H. Gratwick for some new plates on bottom and general repairs.

Since my last report I have to announce the death of Capt. J. F. Stafford, an old settler, who was familiarly known as "The Watchdog of the lake Front." Capt. Stafford was born at Dublin, Ireland, Aug. 11, 1820. In 1828 the Stafford family came to America and located at Port Hope, Ont., moving later to Rochester, N. Y. At the age of 16 he studied medicine and then worked in a printing office. His next move was to become a sailor, and he accordingly shipped as boy on the schooner Brown, in the Lake Ontario trade. In 1837 he visited Chicago for the first time. He worked on vessels during the summer and in the printing office in winter until 1841, when he bought the Buffalo coffee and spice mills. He ran this establishment successfully until 1848, when he sold out and purchased the brig Uncle Sam, which was lost on her first voyage. He then bought the City of Buffalo, which was also wrecked. For several years he engaged in the grain trade throughout the south, after which he returned to Buffalo. He came to Chicago in 1852 and opened a grocery store at 148 South Water street. He was successful in business and invested his surplus funds in lake boats, having at one time a fleet of ten vessels. He afterwards purchased a half interest in the Sand's Brewery and followed with this an investment in the wholesale liquor business. Capt. Stafford retired from business in 1862, having amassed a large fortune.

## BUFFALO.

*Special Correspondence to The Marine Record.*

The tug Kelderhouse, of Maytham's line, and the Conneaut, of Johnson's line, have been laid up.

There is any quantity of damaged grain turning out these days. The Mills, John F. Eddy, Alva, Chili, America and Gilchrist are only some of the first on the list. The latter boat was also 150 bushels short.

Ice is beginning to be a nuisance in the harbor and tug men are growling their heads off, so also are the vessels waiting for an elevator, as steam must be kept up to prevent pipes freezing until the vessels are placed in winter quarters and properly laid up.

Representations ought to be made to the Dominion Minister of Marine pointing out the necessity of a light on Point Abino. The committee on aids to navigation of the Lake Carriers' Association as well as the different ship masters and pilots' lodges might find it possible to advance this measure during the present winter.

Buffalo Harbor, No. 41, Masters and Pilots' Association, will hold a meeting on Tuesday evening next at the society's room, corner of Pearl and Seneca streets, for the purpose of electing officers for the coming year. Monday is the date of the regular meeting, but on account of its being a legal holiday an adjournment was made until Tuesday.

Captain Duncan Kennedy, U. S. N., light-house inspector for the tenth district, thinks it is extremely improbable that any of the other light-houses will be equipped with electric lights, even though the experiment now being tried at Marquette should prove successful. The government made a test of various means of lighting some years ago, and decided oil lamps were superior to any others as being more reliable and less expensive.

Another month will serve to complete the extensive shop addition at the Union Dry Dock Co.'s shipyard. The building proper is practically finished and the machinery is being put in position. Among the new features will be a large electric shop crane, costing several thousand dollars. A very large amount of repair work has already been booked for the winter, which the greatly improved facilities will enable the Union Dry Dock to turn out much more rapidly than heretofore.

There has been considerable discussion going on, as usual, relative to the navigable condition of Niagara river. Two sets of government engineers are at work on the survey of the river, one being attached to the lake survey and the other in the interest of the ship canal. Government Engineer Symons agrees with the best informed lake men that it is a mistake to attempt a deep channel in the Niagara. The current is so strong that it could not be dug and kept safe without great cost.

The local inspectors of steam vessels concluded not to take a hand in the disputed cause of the sinking of the steamer Starrucca and the Maritana. They took up the case and examined some witnesses but found no decisive evidence, and reported that they were unable to fix the blame on either side. Now let us appeal from "Philip drunk to Philip sober," for, if the executives and expounders of the sailing laws are unable to express an opinion we are indeed in a h—ll of a fix.

No attention is paid here to the plans talked of at Cleveland for a mutual marine insurance association. It is simply regarded as the old chestnut. The entire fact of the matter of lake underwriting and the imposition of higher rates is because the business is not handled properly. Tonnage should be classed, rated and insured accordingly; let squeal who may. All that is wanted is the backbone to rate vessels the same as is done elsewhere, and not class the old tanks and sieves on a par with well kept out craft.

Dock room has been at a premium with so many vessels bunched here this winter. It has been suggested time and again in the RECORD that good moorings could be laid in the outer harbor here as well as at other ports for vessels to hang through the winter. If it is not a safe anchorage then breakwaters are failures. There is time enough for any repairs and tinkering to boats in the spring when the ice is rotten and they might just as well be moored in tiers in the outer harbor as jamming the creek. The same remark applies just as well to Cleveland and Chicago.

On Thursday evening, the tug T. M. Moore, owned by Capt. Edward H. Maytham, and in use for a short time on the ferry at Grand Island, was burned to the water's edge. The fire is supposed to have originated from an exploding lamp. Shortly before the blaze was discovered the crew had left the tug for supper. When the alarm was given she was past saving and to prevent fire communicating to the regular ferry tug which had gone down to relieve the Moore a few hours before, the blazing boat was cut adrift. Her blackened hull now lies on Rattlesnake Island. The Moore was but recently purchased by Capt. Maytham, at Toledo.

There are but few ports in the world that could equal the showing of tonnage in this harbor at the present and due for wintering here. The Superior, Empire, Crescent, Queen and Zenith City's are all at this port with half a dozen other modern-built, high-classed, 6,000-ton steel steamers. These are the 200,000-bushel boats, a couple of which can walk away with the slack of an elevator full of grain, or the tail end of an iron ore or coal mine. Those Michigan people might put a fence around all the Canadian stumpage they own and float it across the lake. If they don't want to do that, a single trip charter of the Wolvin fleet (the City's) would do it for them at a minimum outlay.



## DETROIT.

*Special Correspondence to The Marine Record.*

The annual meeting of the Dry Dock Association of the Lakes will be held at the Cadillac hotel here on Tuesday next, January 3rd.

The Detroit Dry Dock Company has repair work ahead for nearly all winter. Its an ill wind that blows nobody good and the ice jam on Lake Erie has furnished work for a large body of men here this winter.

A special from Houghton, Mich., says, Practically every mine in the lake copper district is shipping copper by rail. This has not been done before since the French syndicate cornered copper and indicates a phenomenal demand for the metal at home and abroad.

There is no third term heresy among Detroit shipmasters as the local branch of their association has re-elected Capt. McKay to the president's chair. It is only fair to state, though, that the captain raised objections to this apparent cinch on office, but his scruples were overruled forthwith.

Gray & Gray, representing the J. Emory Owen estate, owners of the steamer John Owen, have brought suit in the United States District Court here, through Shaw & Cady against the owners of the small steamer Atlantis, John R. Snook, of Mt. Clemens, in the sum of \$21,000 for the stranding of the Owen in the Limekiln crossing October 28th last.

To prevent a blockade of eastbound freight at St. Ignace, the South Shore Railroad & Transfer Company have put on night crews and the steamer Ste. Marie is running night and day to her fullest capacity. There are hundreds of cars of flour and copper in the yards and it is expected the ice crusher railroad transfer steamer St. Ignace will also have to be put into commission if the rush continues.

Busy times are in evidence at the wooden shipyard of Capt. James Davidson, West Bay City. Two large schooner consorts, sister ships to the Chickamauga, launched late last fall, are now all in frame, the floor keelsons in, and also several strakes of bilge keelsons. These vessels are being built exceptionally strong and staunch and will be ready for chartering at the first opening of navigation in the spring.

James R. Parker who has been all season chief mate of the Wilson line steamer, Spokane, Capt. Tousey, passed a day here this week visiting friends. The Spokane was in the ice jam on Lake Erie with a cargo of 4 cent wheat from Duluth and the only steamer I understand that delivered her cargo in Buffalo on a 4 cent charter this season. Mr. Parker is well thought of wherever he has sailed and is an energetic, skillful pilot and navigator. He resides during the winter at Algonac.

Emily McWethy, of Detroit, avers that on September last she bought a return ticket over the Detroit, Grand Rapids & Western railway, the Chicago & West Michigan railway and the Holland & Chicago steamer line to Chicago, under which she claims she was entitled to a berth on the steamer between Holland and Chicago, both going and coming, but she alleges that no berth was supplied her on either trip, although she demanded one. She has brought suit here against all three companies, claiming \$5,000 damages.

Detroit lodge of the Shipmasters' Association has elected these officers for the coming year: President, Capt. A. J. McKay (his re-election for the fourth consecutive time); first vice president, Capt. William Roach; second vice president, Capt. James Watts; secretary, C. L. Wilson; treasurer, Capt. Hiram Still. Capt. James Waltman was re-elected trustee for the three year term. The officers will be installed next Tuesday evening. Capt. James Beaufait was appointed marshal, Capt. James Parsons chaplain and Capt. George Burns sentinel. The lodge will give its annual ball at Strassburg's Academy, January 24.

Capt. William Snell was to have been married Tuesday to an estimable young lady of this city. At 1 o'clock in the afternoon he died, after a short illness, of cancer of the stomach. The captain was but 26 years of age, but had sailed from an early age. In 1897 he had charge of the well known upper lake passenger steamer Soo City, and this season served as mate on the Stevens and Ward, of the Union Transit line. He laid up the Stevens a month ago and came home, and since then had been complaining at times of his trouble, which was known to be cancer. He joined the Detroit lodge of the Shipmasters' Association last spring, and was one of the last two to become members. He left a mother and sister besides his intended wife.

Attorney Henry Russell, of the Michigan Central Railway, says the bill introduced by Senator McMillan and Congressman Corliss for a bridge across the Detroit river, is entirely new and has nothing to do with those that went before it. It is in the interest of the Detroit River Bridge Company, organized by Michigan Central people, but which is open as a corporation to all other Detroit roads that run ferries on the river or that may do so in the future. Otherwise it is the same as the Grand Trunk and Wabash bills, except as to location. It provides for a location anywhere from the northeasterly city limits to a point not more than two and one half miles southwest from the southwesterly city limits. This company has filed articles of incorporation with the Secretary of State at Lansing, capital \$2,000,000, with a small amount paid in.

Capt. Herbert Parsons, who took the schooner Porter to salt water and lost her off Gloucester, Mass., has returned to his home at this port. He says that the gale in which the Porter went down was something which for severity he never imagined possible. The crew were taken off by a fishing schooner which towed the Porter some time. The captain is quoted as saying the salt water captains who took

the steamer in charge have no sand whatever. They cut loose from their tows at slight provocation. The Porter was cut off twice without reason. Evidently Capt. Parsons was quite out of his element. He saw more severe weather than ever he could even imagine, and then he gets back at the men who make their living by handling vessels on the coast. It is safe to say that a towline is held on to on the New England coast as long as it is on the lakes or elsewhere.

## IN WINTER MOORINGS.

Milwaukee's fleet in winter moorings consists of fifty steamers, eleven tow barges and twenty-five schooners. Of these thirty-five steamers and nine barges are grain carriers, with a capacity of about \$2,800,000 bushels of wheat. The vessels comprising the winter fleet are as follows:

Steamers—W. H. Wolf, Minnesota, Fred Pabst, Havana, Sparta, A. Nimick, G. W. Roby, Thomas Davidson, Maryland, F. L. Vance, R. P. Flower, Denver, Pueblo, Marian, Omaha, Topeka, John Duncan, John Owens, S. S. Wilhelm, Helena, Pathfinder, Uganda, Nyanza, Cumberland, S. J. Macy, City of Paris, Vulcan, W. M. Egan, P. P. Pratt, Tom Adams, John Plankinton, Niagara, Hennepin, Parks Foster, Alice Stafford, E. A. Shores, C. Campbell, G. Burnham, C. Hickox, Rand, E. E. Thompson, Joys, G. C. Markham, Hilton, Minnie E. Kelton, H. A. Root, J. W. Westcott, Adella Shores, Pine Lake, revenue cutter Morill—50.

Schooners—Emily and Eliza, Vermont, Charles Luling, Nancy Dell, La Petite, Boaz, M. A. Gregory, Dan Mabee, Fearless, Experiment, Oneida, C. J. Smith, Carrier, Sardinia, W. Aldrich, Willie Loutit, Annie O. Hanson, Ebenezer, J. C. Bauer, Elida, Leo, A. B. C. F. M., C. T. Wyman, Cynthia Gordon, E. Scoville—25.

Barges—Amboy, Antrim, Nellie Redington, Mabel Wilson, Yukon, Aberdeen, Sagamore, Nirvana, Galatea, Butcher Boy, Grace Grummond—11.

The winter fleet laid up at Detroit are as follows: Steamers—Daisy, Marigold, Haze, Hancock, Idlewild, Darius Cole, Arundell, City of the Straits, City of Alpena, City of Toledo, City of Mackinaw, City of Mt. Clemens, Greyhound, City of Detroit, State of Michigan, Newsboy, Mascotte, Hattie, John Pauly, Bessie, Fessenden, Frank Kirby, J. H. Outhwaite, S. C. Reynolds, Amaranth, Jessie Farwell, Aztec, B. Whittaker, Ogema, St. Paul, Henry Johnson, M. M. Drake, Grecian, Maritana, Selwyn Eddy, M. T. Greene, J. E. Hall, Atlantic, Houghton, Shepherd, Starke, Forest City, R. J. Hackett, Sunshine, Black Diamond, S. B. Curtis.

Tugs—Balize, Kate Williams, Florence, G. A. Ruelle, John Miner, C. A. Lorman, Champion, Marion Teller, Faragut, G. rman, W. A. Wright, G. A. Siginson, Cora, Cram, Grayling, Rob Roy, Maggie Ashton, Dave and Mose.

Schooners—Zapotec, Saveland, Senator, Angus Smith, A. D. Hayward, Troy, Moravia, John Breden, Auranian, G. E. Hartnell, Lilly May, J. R. Hoyes, Manitou, Dakota, Kate Darley, Fostoria, Dauntless, H. A. Barr, G. H. Waud, Koal Kabin, Charles Chambers, William Stone, John Rice, M. I. Wilcox, Nassau, Reuben Doud, J. S. Richards.

The following vessels are in winter quarters at Buffalo: Steamers—City of Bangor, Penobscot, A. Carnegie, Lansing, R. P. Fitzgerald, P. Minch, New York, Rochester, H. J. Jewet, Chemung, Rambo, Starrucca, Joliet, Griffin, City of Cleveland, John F. Eddy, Iroquois, Bulgaria, P. D. Armour, Majestic, Viking, India, Japan, China, G. Campbell, Juniata, Lycoming, Delaware, Wissahickon, Conestoga, C. Black, L. C. Waldo, Iosco, Merida, Harper, Germanic, Louisiana, Fedora, Yakima, Lockwood, S. Langell, G. G. Hadley, John Oades, H. J. Johnson, Cormorant, Stafford, Shenandoah, Rappahannock, Sacramento, Amazonas, Orinoco, Nicaragua, Crete, Abyssinia, Algeria, Paisley, Hudson, Mohawk, Arabia, Vanderbilt, Syracuse, Montana, Commodore, Milwaukee, John Pridgeon, St. Paul, Nebraska, Huron, Minneapolis, Maricopa, Mariposa, Mariska, Maruba, Matoa, Maritana, Thos. Wilson, J. P. Colgate, S. Mather, Rockefeller and Trevor, North West, Northern King, Northern Wave, Northern Queen, North Star, North Wind, Madagascar, White Star, Mecosta, John Mitchell, T. Maytham, Progress, Livingstone, Chili, America, Lackawana, Russia, Cuba, Avon, Portage, E. Ward, W. H. Stevens, John M. Nicol, James, Fisk, Jr., Panther, Yale, Centurion, Oglebay, Frost, Iosco, Amizona, Shrigley, Schoolcraft, E. Smith, J. J. McWilliams, Saranac, E. P. Wilber, Seneca, R. A. Packer, H. E. Packer, Oceanic, Clyde, Tacoma, S. Marshall, R. Mills, Senator, I. W. Nicholas, Alva, J. W. Moore, George F. Williams, R. L. Fryer, Superior City, Empire City, Queen City, Zenith City, Victory, Australia, Peshtigo, Republic, Penobscot, M. B. Grover.

Schooners—Our Son, Adriatic, John Kelderhouse, Scotia, L. S. Hammond, S. J. Tilden, H. Bissell, Gardner, J. Magee. Barges—Robinson, Plymouth, Taylor, Filmore, Kingfisher, D. P. Dobbins, Amazon, Tyrone, Francomb, Connelly Bros., Ogarita, Nos. 111, 132, 133, 134, 109, 117, 126.

At Erie, Pa., the following boats will lay up for the winter: Steamers—Neosho, Norwalk, E. M. Peck, Manchester, Ferdinand Schlesinger, City of London, Brazil, S. S. Curry, Savona, Conemaugh, Alaska, Mahoning, Codorus, Wissahickon, Lehigh, J. Emory Owen, Walter Vail and schooners Baltic and Constitution.

At Alpena, Mich., steamers, Alaska, F. W. Fletcher, Norseman and Stephen C. Hall. Schooners, Theodore Voges, Hunter Savidge, J. B. Ketcham, W. T. Chapelle, Peoria. Barges, Ida Keith, Lathrop, Russian Light Guard, India, Knight Templar, Sam Flint.

Irascible Lieutenant (down engine room tube) Is there a blithering idiot at the end of this tube? Voice from the engine room—Not at this end, sir.—Ex.

## REPORTED BY THE LOOKOUT.

It is now quite a dog watch ago since we commenced consuming the Jos. Dixon Crucible Company's superfine graphite in the form of lead pencils, since which time we have always had the best kind of material to make our mark with. There are pencils and pencils but commend us to the manufacture of the Joseph Dixon Crucible Company, of Jersey City, N. J.

During the thaw at the end of last week vessel property in winter moorings at Lorain and Toledo was placed in great danger, several large steel steamers breaking adrift at the former port. Neither Toledo nor Lorain have a fireboat or any craft fit to keep an open channel so as to prevent an ice gorge during the winter, though the recent warning ought to be enough to place the citizens of both towns on their guard for a similar event in the future. It should also be remembered that vessels will only winter at a safe port.

In connection with the effort which is being made by the United States Commissioner of Navigation to encourage the use of short names for ships, we would point out that when a vessel's name exceeds ten letters additional cost is incurred when cabling. This is looking at the question from the utilitarian standpoint entirely, and it must be patent to anyone that if two steamers were offered to a merchant or freight agent, precisely equal in every other respect, the preference would be given to the boat the name of which could be cabled at the less expense.—Syren and Shipping, London.

The protection given by the new breakwater at Dunkirk, built since the harbor appropriation of \$400,000 was secured, was amply demonstrated during the recent severe storms. Heretofore much damage was done to the old docks and shore by the washing away of lumber and earth, while small craft tied up for the winter suffered every conceivable damage. Now the waters within the harbor are calm, while outside the breakwater they roll ten to twenty feet high, dashing against the strong barricade with tremendous force. Vessels are tied up with perfect safety, and no loss has resulted to any kind of storage on the docks or the lands.

For two years, recently, it has been the head of Lake Erie which has ended lake navigation. In 1893 and 1895 there were great ice blockades at that point, but the number of boats concerned was much less than this year. In 1894, 1896, and in 1897 navigation between Chicago and Buffalo was stopped by the expiration of insurance, more than by ice. In 1897 ice in the "Soo" passage played an important part in the great contest between Joseph Leiter and P. D. Armour, which was ended by Mr. Armour employing ice crushers to bring down the boats which contained his wheat. There has been no corner this year and vesselmen have had to pay for their own ice breaking.

Capt. Singer, manager of the White Line Towing Company, Duluth, has made a reputation and gained a record this season as a successful salvor, wreck releaser, etc. Taking the loaded steel steamer Arthur Orr off the rocks on the north shore of Lake Superior and getting her safely to dry dock was an excellent piece of work, favored by the weather, but well planned and executed. Then as a forlorn hope, going back and releasing the Tampa was a crowning effort and enough for the season. It is just possible that Capt. Singer may employ his leisure during the winter in releasing the steel steamer Harlem from Isle Royale and skidding her along on the ice to the West Superior dry dock.

The report that an enormous gun factory is to be established in connection with the Newport News ship building concern was confirmed by Collis P. Huntington this week. Mr. Huntington is one of the heaviest stockholders in the old establishment, and will retain a heavy interest in the new. In an interview Mr. Huntington said: "I have been in negotiation with the Messrs. Vickers, Sons & Maxim, of England, who have thought of taking a large interest in the plant and of establishing at Newport News in connection with the shipyards an extensive plant for the manufacture of guns. If these negotiations should be carried to a conclusion there would be established at Newport News a new industry. The yard would continue to be an American enterprise, as I do not propose to sell my holdings outright, but to retain a large interest." The new establishment will, it is said, be not only the largest in the United States, but will exceed that of Woolwich, England. It will more nearly approach the great Krupp works at Essen, Germany, than any gun plant in existence.

## TRIBUTARY TO THE LAKES.

The United States consul at Gaspia Basin, Quebec, has made a report to the State Department in regard to the formation of a new trans-Atlantic Steamship Co., to have its terminus at Paspebiac, on Gaspia Basin, with railroad connection with the Lake Superior district. The consul says that one of the objects of the new enterprise is to secure the output of western grain by an all-Canadian route. Paspebiac is well situated for the purpose, the consul says, being much nearer Europe than the inland ports of Quebec and Montreal, and because it will be open at least two months longer in the winter, and much earlier in the spring than the St. Lawrence cities, besides cutting off about 600 miles of difficult navigation. He adds that this advantage will admit of the shipment of a larger quantity of western grain and also allow the western farmers a longer season in which to market their harvests. The proposed steamship line is between Paspebiac and Milford Haven, Wales.



## CORRESPONDENCE.

We do not hold ourselves responsible in any way for the views or opinions expressed by our correspondents. It is our desire that all sides of any question affecting the interests or welfare of the lake marine should be fairly represented in THE MARINE RECORD.

## A LIGHT-HOUSE WANTED ON PEELEE MIDDLE GROUND.

Peelee Island, Dec. 1898.

To the Editor of the Marine Record:

The question of a light-house on the Middle Ground in Peelee Passage, Lake Erie, has for some time been a subject for discussion, but the events of the past thirty days brings it to the point where immediate action is imperatively called for.

During the recent fearful gales and early freezing no less than four vessels have been on it, two, the Fayette Brown and George Stone, are now afloat, although badly damaged; two others, the Presley and City of Rome, also grounded amid ice and rocks on this dangerous reef. The damages will now amount to many thousands of dollars, far more money than would build and equip an excellent light. The plan has been broached to remove Peelee Island light to the Middle Ground, but this would not do from either a marine or local standpoint. The entire population of the island, whose business calls them often across the lake, are too nearly interested to listen to this, and a petition signed by every voter here, and addressed to the government at Ottawa would be heeded; yet, this same influence would be cheerfully given toward prevailing upon the same government to speedily erect a light-house on the Middle Ground.

Whilst primarily the government of Canada heeds and must for political reasons hear its own people first, yet it has always lent a ready ear to the needs of American commerce, and the proper way is to join the two influences, Canadian and American, to seek what is most certainly a common interest.

F. B. McCORMICK.

## CLEVELAND VERSUS THE CLYDE.

BRUNSWICK, GA., Dec. 26, 1898.

To the Editor of The Marine Record:

I have just read, with great interest, the comment in the MARINE RECORD of the 15th inst. in relation to an editorial contained in the Plain Dealer, Cleveland, wherein the absurd statement was made that next to the Clyde, Cleveland was the largest shipbuilding port in the world. My interest in the matter compelled me to look this up and see what Lloyds said about it and I find that you greatly underestimated the extent of the Clyde shipbuilding, for, according to Lloyds, 1895-96, the Clyde has 45 shipbuilding concerns, 45 of which manufacture or build engines and boilers and 45 concerns manufacture engines and boilers exclusively—or a total of 90. Cleveland has two yards, both of which manufacture engines and boilers, or a total of four, as compared with 90 on the Clyde.

To bring this question more up to date I find that the Clyde shipbuilding returns for November launches aggregated 31,000 tons, and for eleven months ending November 30 the output foots up to 372,000 tons, or 32,000 tons in excess of the output for the year 1897, with another and a very busy month still to run this year. Therefore, if we allow for December a mean monthly shipbuilding output to complete the year I find that the Clyde will have launched 405,818 tons for the year 1898, though a latter statement just to hand, shows a total of 328 vessels of 466,832 tons.

According to the Treasury Department figures for this year the lakes put afloat 54,084 tons, and by this showing it would take all the shipyards on the lakes nearly eight years, building at the same rate as during the last fiscal year, to equal the output of the Clyde for the year just closing.

Figures are rather peculiar, too, sometimes, for in 1897 the northern lakes are credited with having 3,230 vessels of 1,410,193 gross tons. On June 30, 1898, with 3,256 vessels of 1,437,500 gross tons, this only shows an increase of 26 vessels aggregating 27,387 tons up to the ending of the fiscal year, if these figures mean anything, and they are taken from the annual report of the Commissioner of Navigation, it would require about 15 years at that rate of increase for the northern lakes to add to its tonnage the output of the Clyde in one single year. Yours truly,

H. M. KING.

We have so frequently corrected the errors which our correspondent writes about in the article referred to, that we simply generalized in mentioning the 50 shipbuilding industries on the banks of the Clyde between Greenock and Glasgow.—Ed.

## SIGNAL STATION ON MANITOU ISLAND.

Senator McMillan has introduced a bill providing for the erection of a wind signal station on Manitou Island, to cost not exceeding \$15,000. The necessity of the Manitou station was fully set forth in the report and supported by numerous petitions, signed by vessel men. The principal initial cost will be for the nine miles of cable wire and eight miles of line for telegraph or telephone service.

## WRECKING THE TAMPA.

The cabins of the steamer Tampa are reported in bad shape, owing to the busy manner in which the north shore "pirates" rifled the vessel during the two weeks in which she was abandoned, ripping off the mahogany trimmings and fixtures. Just forward of the boiler room there is a twist in the hull that is noticeable, but experts say that as soon as the steamer is placed in dry-dock and well settled on the keel blocks she will fall back into shape again. One of the steel arches was broken where the hardest strain came when the Tampa rested on the rocks, but when the water was pumped out the opening closed and the twisted portions worked back to their shape. It is estimated that after the wrecking bills, repair charges and other expenses of saving the Tampa are paid, the insurance companies will save nearly \$50,000, providing the boat is found to be a constructive total loss, of which there can be no doubt.

## EASTERN FREIGHT REPORT.

Messrs. Funch, Edye & Co., New York, in their usual weekly eastern freight report to the RECORD state that the freight market since our last report has continued to show little life, and the demand for grain boats, otherwise than for prompt and early January loading, has been practically dead. We may, therefore, assume that after the turn of the year the enquiry for this tonnage will improve, as very little has as yet been provided for forward loading, both in respect to berth boats and Cork f. o. tonnage. We can only express the hope that this likewise may apply to cotton freights, both from the Gulf and the Atlantic ports, as the movement of cotton all over the South at the moment is extremely restricted. The time boats reported are mainly for the West Indian trade, as the demand of trans-Atlantic charterers has been generally supplied. In view of the decline of cotton charters from the Gulf, timber business from that quarter is coming to the fore, and we look for some further charters for that commodity in the near future.

Business in sail tonnage has been restricted by the unbroken scarcity of available vessels, and the list of charters for the week is abnormally small. Rates, however, continue unchanged, and rather inclining to firmness.

## VISIBLE SUPPLY OF GRAIN

As compiled for The Marine Record, by George F. Stone, Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY Bushels.
Buffalo .....	3,948,000	1,296,000	575,000	82,000	1,988,000
Chicago .....	3,394,000	5,243,000	1,240,000	348,000	511,000
Detroit .....	286,000	570,000	3,000	19,000	82,000
Duluth and Superior	3,288,000	1,296,000	64,000	42,000	310,000
Milwaukee .....	17,000	.....	3,000	2,000	83,000
Montreal .....	21,000	26,000	64,000	3,000	5,000
Oswego .....	.....	163,000	.....	.....	97,000
Toledo .....	386,000	937,000	123,000	10,000	.....
Toronto .....	156,000	.....	6,000	.....	45,000
On Canal .....	.....	.....	.....	.....	.....
Grand Total .....	28,783,000	18,700,000	5,949,000	1,311,000	4,144,000
Corresponding Date, 1897 .....	36,616,000	38,150,000	12,772,000	3,710,000	4,789,000
Increase .....	.....	547,000	.....	185,000	.....
Decrease .....	1,776,000	.....	60,000	.....	25,000

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

## NEW ELEVATORS FOR LAKE SUPERIOR.

There are at present four elevator projects contemplated for the head of Lake Superior. Two will be steel elevators and all will be operated by electricity. One of the new houses will be erected by the Great Northern Railroad Co. at West Superior. Another will be built by a Duluth-Minneapolis concern on the Duluth side of the bay. The third one will be built by Spencer Kellogg, of Buffalo. The elevator capacity of the head of the lakes will be increased 5,000,000 bushels if these projects are all carried into effect. The Great Northern plant, when completed, is to hold about 3,000,000 bushels, the Kellogg plant 1,000,000 bushels, and the Minneapolis-Duluth concern 1,000,000 bushels.

## NOTES.

THERE are now 71 shipbuilding yards and 17 docks in Japan, independent of official plants.

THE annual report of the Chief of Engineers, U. S. A., for 1898, has been published and conveys as usual full information in regard to all the river and harbor improvements about our coasts, the work that has been accomplished and what is under way or projected.

THE officers of the Richelieu and Ontario Navigation Co. have just issued a memento in the form of an illustrated card wishing their friends and patrons the compliments of the season. A feature of the engraving is the Union Jack entwined with the stars and stripes. Thanks, gentlemen.

THE Edge Moor Iron Company has entered into a contract with the Newport News Ship Building and Dry Dock Company, Wilmington, Del., to furnish and erect the steel work required on a runway viaduct 730 feet long to be erected in its yard at Newport News, Va. The contract will require 1,000,000 pounds of steel.

ONE of the richest zinc mines in Canada has been discovered near Rossport, in the Lake Superior district, by the Grand Calumet Mining Co., Ottawa, who intend opening it up at once. The company have shipped 1,500 tons of ore during the past summer, principally to Antwerp, Belgium, the value of which was about \$30,000.

PRESIDENT THEODORE C. SEARCH, of the National Association of Manufacturers, in a published statement, says: "The members of the association will watch with the closest interest the course of legislation bearing upon shipping matters and will be ready to do their share in the work of shaping measures to accomplish the desired ends. The manufacturers are deeply concerned in the matter. They are the shippers of a constantly increasing share of the country's exports—nearly \$300,000,000 worth in the last fiscal year."

THE Falls Hollow Staybolt Co., Cuyahoga Falls, O., recently shipped the Calumet & Hecla Mining Co., Calumet, Mich., a car load of their special manufacture of safety staybolts, since which, they are in receipt of another large order from the same company. It has been found that the hollow staybolts are better in every way and more economical than the drilled and punched bolts, hence, the present order to the Falls Hollow Staybolt Co. for their product, which is also used in marine and stationary boilers.

THE lake marine comprises about 3,500 craft, with a tonnage of 1,500,000, and of this fleet fully one-half are steamers. An important fact is that of these steamers some 500 are of a tonnage of 1,000 to 5,000 and over. This is the great fleet which the Duluth Chamber of Commerce demands shall have access to the ocean, and it appeals to its representatives in the national legislature and to those of other northern states to oppose all efforts to construct any inter-ocean canal until the government shall undertake to build a ship canal from the lakes to the sea.

A NUMBER of miners in charge of Capt. Wilcox have been landed on Michipocoten Island. About sixty men will be employed during the winter, opening up the old copper mine on the island, the property of Mr. Joseph Cozens, of Sault Ste. Marie. Mr. Leopold, of Chicago, Rockefeller, Flagler and other prominent members of the Standard Oil Co. have taken a large interest in the property. These gentlemen are heavily interested in the copper mines of the south shore. Their connection with Michipocoten Island, if this venture proves a success, means an enormous development, as millions are behind these capitalists.

THE Duluth Chamber of Commerce recently adopted resolutions asking that ship canals from the lakes to the ocean be constructed at the same time any inter-ocean canal is. They request the representatives of Minnesota, in Congress, and those of other western and northwestern states to oppose foreign canal building if a home canal is ignored. It seems that some of the "sluggard" cities of the Great Lakes are waking to their interests, object to building another canal besides the Panama ship canal, the latter being about half completed. They demand that a canal be built so that the enormous traffic of the lakes can reach the ocean without breaking bulk. A well informed writer correctly says that the country tributary to the Great Lakes is the treasury of the continent, contains the great deposits of ore and fuels, manufactures most extensively, it almost feeds the nation, it produces the largest portion of our exports, except cotton, and it consumes the largest part of our imports. Surely the Duluth Chamber of Commerce is to be commended for demanding a deep waterway to the ocean.—From the Wauseon (Ohio) Republican.



## SHIP BUILDING—NEW CONSTRUCTION.

Washburn Bros., Thomaston, Maine, are getting out the timber for two 1200-ton schooners, having just completed the large schooner named John C. Haynes.

Messrs. Sawyer Bros., Milbridge, Maine, will build a schooner for Capt. Crabtree, of Hancock Point. The firm are also figuring closely on two other large contracts.

The Red D Line, New York, are about placing a contract for a twin screw steel passenger and cargo steamer about 275 feet keel to go on their route early next summer.

The Staples Coal Company, Fall River, Mass., have just placed a contract for five new coal carrying barges with Robert Palmer & Co., of Noank, Ct., two of the barges to carry 900 tons each, two to carry 1,000 tons each, and one to carry 1,200 tons. It is expected that these barges will be completed in about three months from date of contract.

It is expected that early in January the large four-masted steel ship which is being built at the yard of the Sewalls, Bath, Maine, will be launched. This ship is to be named Arthur Sewall, after the senior member of the firm. Early this season a steel ship was launched from this yard, and as soon as the one now on the stocks is off the ways, the keel for a third steel ship will be laid. These ships cost nearly \$150,000 each.

At the shipyard of Lewis Nixon, Elizabethport, N. J., a new type of vessel was launched last week. The boat was designed to carry fresh water for a naval fleet. She is constructed entirely of steel, with numerous watertight compartments, expansion tanks and powerful steam pumps and can carry 175,000 gallons. The contract for this boat was signed on September 25 and only 40 days elapsed since the first frame was raised until she was put into the water. Three of these boats are to be built at the Nixon yard.

The Hartford & New York Transportation Company having disposed of their steamer Hartford to the government for service on the south side of Cuba, are now asking for bids on the specifications for a new steel passenger and cargo steamer about 250 feet keel. A meeting of the directors of the company was held a short time since and Superintendent E. B. Williams was sent to Philadelphia to interview the firm of Neafie & Levy, and other ship building firms with a view to having bids submitted for a steamer built on the general lines of the Middletown. C. C. Goodrich is the general manager of the line.

There will be launched on January 19 a large five-masted schooner from the yards of H. M. Bean, Camden, Maine. Her general dimensions are 318 feet over all, 282 feet keel, 44 feet, 4 inches beam and 21 feet 6 inches in depth. The frames are Virginia oak and her planking Georgia pine. The foremast is 29 inches in diameter, and the others 28. Each will be 112 feet long, topmasts 56 feet in length. The schooner is being built for Capt. John G. Crowley, of Taunton, Mass., and she will be used as a collier carrying coal between Philadelphia, Norfolk, Baltimore and Boston. N. T. Palmer, Bath, Maine, is building a similar vessel to be launched a little later, and sister ships are on the stocks at the yards of Percy & Small and Master Deering, Bath, Maine, thus making four large five-masted schooners on the stocks at one time in the Maine shipyards.

A contract has been signed by Hon. Edward H. Blake, of Bangor, Maine, with the Gas Engine & Power Company, of Morris Heights, N. J., for the construction of an ocean going steam yacht of about 200 tons gross and a speed of 16 knots an hour. The yacht will be named the Aria. The yacht will be built of steel with watertight compartments; length will be about 145 feet over all, beam 23 feet and depth 12 feet. Her power will be furnished by a triple-expansion engine, for which steam will be furnished by one of the new type water tube boilers. The yacht will be built complete by the Gas Engine & Power Company at their yards, in which the United States torpedo boat Bailey is being constructed. The contract time for the construction of the Aria is five months, so that she is expected to be ready for sea early in May.

The Puget Sound surveyor for the Bureau Veritas reports that the two new vessels, a barkentine and a schooner, on the stocks at H. D. Bendixsen's shipyard, Humboldt, are now in frame with their keelsons in. The vessels will be two of the largest ever built on Humboldt Bay. Both vessels are being built for Hind, Rolph & Co., shipping and commission merchants of 302 California street, San Francisco. The dimensions of the new vessels are, for the barkentine, length, 185½ feet; beam, 39 feet 10 inches; depth of hold, 16 feet 8 inches. She will be a full rigged, four-masted barkentine especially fitted for the lumber and sugar trade. She will be fitted with a pump-brake windlass, and will carry a

donkey engine and all the necessary gearing for operating pumps, windlass and sails and handling cargo; The other vessel, a four masted schooner, will have a length of 159 feet 4 inches, with 37 feet 8 inches beam and 13 feet 8 inches depth of hold. She will be fitted with the same mechanical appliances as those of the barkentine.

Mr. Anothony J. Drexel, Philadelphia, Pa., has placed an order on the Clyde for a large, handsome, twin screw steel yacht to class under Lloyd's special survey 100 A1. Her general dimensions are: Length on load water line, 268 feet; beam, molded, 36 feet; depth, molded (least to main deck), 20 feet. She will have a clipper stem and elliptic stern, with spar deck extending fore and aft. Tonnage 1,630 net and 1,810 gross. She will be supplied by the builders with two sets of triple-expansion engines, having four cylinders working four cranks. The diameter of the cylinders will be 22 inches, 36 inches and (two) 40 inches, with a piston stroke of 27 inches. She will have forced draught and steam will be supplied at a pressure of 200 pounds by two double-ended boilers. The diameter of the inner casing of her funnels will be 8½ feet. The engines are to indicate 4,750 horse-power, and give a speed of 15¾ knots an hour at least. The new vessel, which will probably be named the Margarita III, is to be completed and have her trial concluded by the beginning of the year 1900, when she will be taken over the Gourock bay course. Compared with the Margarita No. 2, which was built at Troon in 1896 for Mr. Drexel, the new vessel will be 28.2 feet longer on the water line, with 2.5 feet more beam and 1.5 feet more depth. Mr. Drexel's new steamer is the sixth vessel Mr. G. L. Watson has designed for an American since his return from the States in 1895. The others were Mr. Ogden Goelet's Mayflower, 1844 tons; Mr. Robert Goelet's Nahma, 1806 tons; Mr. Eugene Higgins' Varuna, 1564 tons; Mr. A. J. Drexel's Margarita, 1322 tons, and Mr. John E. Brook's Andria, 432 tons. The builders, Messrs. Scott & Co., have built in their time no less than 28 steam yachts. These include the steam yacht Aegusa, 1242 tons, which they built in 1896 to the order of Commendatore Ignazio Florio, of Italy; the steam yacht Floros, 1086 tons, which was built for the late Alexander Kousnetzoff, the Russian millionaire, and Mrs. A. B. Laidlaw's steam yacht Tuscarora, 591 tons. A well-known Clyde yachtsman is at the head of this firm, Col. John Scott, C. B., who is commodore of the Royal Clyde Yacht Club.

# REPORT OF FREIGHT AND PASSENGER TRAFFIC TO AND FROM LAKE SUPERIOR FOR THE MONTH OF DECEMBER, 1898, INCLUDING STATISTICS OF THE UNITED STATES AND CANADIAN CANALS AT SAULT STE. MARIE, MICHIGAN AND ONTARIO.

EAST BOUND.			
ITEMS.	US CANAL	CANAD'N CANAL	TOTAL
Copper, net tons.....	2,425	.....	2,425
Grain, bushels.....	1,730,604	.....	1,730,604
Building Stone, net tons.....	.....	.....	.....
Flour, barrels.....	326,694	1,060	327,754
Iron ore, net tons.....	105,762	7,912	113,674
Iron, Pig, net tons.....	.....	.....	.....
Lumber, M. ft. B. M.....	11,080	.....	11,080
Silver Ore, net tons.....	.....	.....	.....
Wheat, bushels.....	9,494,483	364,000	9,858,483
Unclass'd Freight, net tons...	4,997	21	5,018
Passengers, number.....	36	11	47
WEST BOUND.			
ITEMS.	US CANAL	CANAD'N CANAL	TOTAL
Coal, (hard) net tons.....	5,800	.....	5,800
Coal, (soft) net tons.....	37,528	.....	37,528
Flour, barrels.....	.....	.....	.....
Grain, bushels.....	.....	.....	.....
Manufactured Iron, net tons..	2,055	.....	2,055
Salt, barrels.....	.....	.....	.....
Unclass'd Freight net tons...	6,188	60	6,248
Passengers, number.....	.....	25	25
East Bound Freight, net tons.....	.....	.....	515,700
West Bound Freight, net tons.....	.....	.....	51,631
Total.....	.....	.....	567,331
Total Craft, United States.....	.....	.....	278
Total Craft, Canadian.....	.....	.....	33
Total.....	.....	.....	311
Total Registered Tonnage, United States.....	.....	.....	368,806
Total Registered Tonnage, Canadian.....	.....	.....	11,934
Total.....	.....	.....	380,740

## CONSENSUS OF OPINIONS—REHABILITATION OF THE MERCANTILE MARINE.

### OUR EXPORTS OF SHIP PLATE.

"With regard to the increasing use of American steel plates in home shipyards it is interesting to recall that when the Dirigo, the first steel sailing ship built in America, was constructed by Messrs. Sewall & Co., at Bath, Me., in 1894, all the steel employed in her construction was made by Messrs. D Colville & Co., of Glasgow. At that time it was found that ship plates could be delivered on the Atlantic coast from England cheaper than from American mills."—Iron and Coal Trade Review, London.

"This is a wonderful change in less than four years. At the present time Scotch shipbuilders are using American steel plates, made in Pittsburgh, for the construction of some of the finest vessels ever turned out on the Clyde. It is not outside of the bounds of probability that in the near future the shipbuilding industry of Great Britain, as well as that of some of the leading continental countries, will be among our best customers for steel plates."—Pittsburg Commercial Gazette.

### REHABILITATION OF THE MERCANTILE MARINE.

"It cannot be doubted that the decline of American shipping engaged in foreign carrying, has been restrictive of a larger American foreign trade in imports and exports. With ships of our own running to all of the chief ports of the world, larger markets for our products would unquestionably have been found, and probably uses for foreign products would also have been discovered by our own people that would have led to larger foreign purchases, with beneficial results to all concerned. Such considerations as these justify the belief that the increase in our foreign trade in the future will only be measured by the increase in our own home-built and home-owned shipping; as the latter increases, so will our foreign commerce."—The Mining Journal, Marquette.

"It is obvious to any man that the United States is going to resume its original position as the chief shipbuilding nation of the world. What is the use of sending thousands of tons of steel to Glasgow and Belfast, as we are doing, when we might as well build the ships and send them? A shipbuilder in this country to-day has the advantage of about \$4 per ton in cost of all steel materials, and he has all his wood-work cheaper than builders in either Great Britain or Germany, and if he cannot take the shipbuilding trade of the world, what is the matter with our shipbuilders?"—Andrew Carnegie.

### NO SUBSIDY FOR SHIPBUILDERS.

"No sensible man pretends that the United States shipbuilders need or deserve subsidies. The aid should go to those who own and run the ships, and that we take it is Mr. Hanna's idea. That the aid should be in the form of a subsidy we do not believe. But so long as it costs more to man and run a ship under the stars and stripes than it does under the British or the Scandinavian flag, so long will it be impossible to transfer the carrying trade to American bottoms. It is not the cost of building the ship, but the cost of manning it that shuts out the American shipper, and makes it impossible for him to compete with the foreigner. The wages paid the officers and crew of an American ship are double the wages paid in the foreign service. The taxes paid by the American ship are enormous. The foreign ship pays little or no taxes. Give the American ship the benefit of a discriminating duty as set forth in the St. Louis platform, in William McKinley's letter of acceptance and Senator Elkins' bill and speech of a year ago, and that will make up the difference and enable the Yankee skipper to compete on even terms with the foreign sailor."—Sandusky Register.

Senator M. A. Hanna believes that his bill for the protection of the American merchant marine will be passed during the present session of Congress. The majority of the Senators, Mr. Hanna states, feel favorably toward the measure, and he has reason to believe the House of Representatives will pass the bill. The bill was introduced in the Senate last week by Mr. Hanna, and in brief provides that subsidies shall be paid to certain freight carrying vessels built in America. The object of the bill is to encourage Americans in transacting relations of a commercial character with the people of foreign nations in American bottoms.

"I think the merchant marine interests of the United States should be given protection as well as the steel interests; for instance," said Senator Hanna, "we are exporting steel to all parts of the world, and especially to England, simply because we have given that industry protection.

"Several years ago the American merchant marine would compare favorably with the commerce carrying vessels of other countries of the world, but lately we have been dropping behind, until at present only 6 per cent. of the American freight is carried in American bottoms.

"The cause for this condition lies largely in the fact that England, Germany, France and other European countries have protected their maritime interests by granting the vessel companies subsidies. The only natural thing for us to do, if we wish to build up our maritime interests, is to do the same thing."

It is possible that if the Hanna-Payne shipping bill be passed at this session of Congress, by the end of ten years there will have been expended in our ship yards as much as a billion and a half of dollars for the construction of warships and merchant ships. The United States will become, in the course of a single decade under the impetus of such a bill, one of the great shipbuilding and shipowning nations of the earth.—Detroit Journal.





ESTABLISHED 1878.

Published Every Thursday by

THE MARINE RECORD PUBLISHING CO.,

Incorporated.

GEO. L. SMITH, President.

C. E. RUSKIN,	-	-	-	Manager.
CAPT. JOHN SWAINSON,	-	-	-	Editor.
THOS. WILLIAMS, Chicago,	-	-	-	Associate.

CLEVELAND,  
Western Reserve Building.CHICAGO.  
Royal Insurance Building.

## SUBSCRIPTION.

One Copy, one year, postage paid,	-	-	\$2.00
One Copy, one year, to foreign countries,	-	-	\$3.00
Invariably in advance.			

## ADVERTISING.

Rates given on application.

All communications should be addressed to the Cleveland office.  
**THE MARINE RECORD PUBLISHING CO.,**  
 Western Reserve Building, Cleveland, O.

Entered at Cleveland Postoffice as second-class mail matter.

CLEVELAND, O., DECEMBER 29, 1898.

## A WORD TO OUR SUBSCRIBERS AND PATRONS.

At the close of the old year and on the confines of the newer, happier and more prosperous one to come, we salute the subscribers and advertising patrons of the MARINE RECORD with the courtesy and good feeling which has been maintained for now nearly twenty-one years. But a few issues more and the RECORD will have attained its majority in point of age and we can truthfully say that we think it is a question, if any class paper now in existence has received such continuous and unvarying consideration at the hands of its clientele.

Through the social, business and vital changes which necessarily occur year after year, the RECORD and most of its past patrons and friends are still to windward, though even through the year just closing we have had to deplore the loss of those, who, like pioneers in a new country, have gone before. Peace be with them and God's consolation to those near and dear whom they have left behind for a season.

We now desire to say that we feel the MARINE RECORD has been a better paper during the past year than ever before. Not given to vain boasting or self glorification, we are morally certain that our subscribers and patrons will echo the foregoing sentiment at the close of 1899. Our business conduct and columns will amply verify this gratifying and righteous verdict and with this positive statement and indisputable assertion we heartily thank all our friends for past courtesies, ask for a continuance of same, and, hoping to make many more staunch adherents to the RECORD columns in the near future, we clap a stopper on our pen pushing jaw tackle by wishing all our friends, and more too, a hearty, happy and prosperous New Year.

THE attention to the committee on aids to navigation of the Lake Carriers' Association is called to a letter in the current issue advocating the placing of a light by the Dominion government on the Middle Ground in Pelee Passage, Lake Erie. Local influences in that vicinity, and more especially the efforts of our correspondent, succeeded in having established the light on Middle Island, also the telegraph cable from Pelee Island to the main land which has been of so much service to vessels during the past few seasons. Local interests are also to be credited with having placed Colchester reef light, the "Dummy," also the light at Kingsville and other aids to navigation. It may be suggested in furtherance of the project to establish a light or other suitable aid to navigation on the Middle Ground, that a joint petition from lake vessel owners' and the voters of the County of Essex, in the immediate vicinity of where the light is required, would, on the eve of a general election for the Dominion Parliament, such as is now near at hand, have a successful bearing in securing the additional light.

## LAKE INSURANCE.

Future insurance rates, clauses in policies, apportionment of losses, the assured to carry an extra portion of the risks, etc., etc., are features that have been gone into more or less since the early closing of navigation, but no advance has as yet been made in any particular direction.

It is more than possible, or rather it looks very probable, and it is a plausible inference, that interests connected with the lake marine insurance business have recently been making use of the lake daily papers to inculcate vesselowners with proper ideas, and in a manner to prepare them for an increase in premiums, as well as more stringent clauses in their insurance policies for the coming season.

An inexplicable candor has pervaded columns of matter apparently laying bare every detail of the business of lake underwriting, but it has all wound up with the artless statement that it is impossible for a general agency to conduct a successful business on an outlay aggregating about one third more than its receipts. We should say so too, but are such the conditions? Notwithstanding the laying bare of underwriting methods and figures, as mentioned in the foregoing, we have to state that the childlike simplicity apparently evinced in the oily blandness with which agents have talked of premiums, policies, total losses, general average claims, damage repairs, etc., etc., underwriters are not giving out their trade secrets for publication at this or any other time.

Now, let us put, or represent the condition as it exists, has always, and must so continue to do, whether exclusive figures are perpetrated or paraded before the view of vessel-owners or otherwise. The proposition is simply this: What determines the rate of insurance on both hulls and cargoes? Simply receipts and expenditures. The receipts meaning the premiums, the expenditures the losses, the whole administered by and with the acme of professional acumen, and accordingly, with the highest degree of economy strictly observed in each detail of creation and finality. Admitting that such are the lines on which insurance companies are now traveling, we may then touch upon figures. Throwing overboard the statements which have been presented to the assurers through the daily press as being, to say the least, biased, we then cut the ground from under our feet, have no starting point, and consequently can't take a departure. Furthermore, to draw conclusions from figures showing simply a portion of the problem is only to court errors and confusion, and we may here remark, that unless this data could be gone into intelligently, and the figures resulting therefrom be accurate, no true thoughts can be derived regarding the standing between the assurer and assured. Hence, the owners of floating property, ship-pers and consignees, must perforce accept the situation as laid before them by the insurance companies doing business on the lakes, and thus the status of the indemnifiers for lake losses, may be summed up at the moment.

## LIFE-TAKERS, NOT LIFE-SAVERS.

In the MARINE RECORD, of December 8, our Cleveland correspondent dealt at some length on inferior life belts as supplied to some lake vessels. The statement was then made that there were to be found life-belts containing the pith of reeds instead of the best quality of cork. In reverting to the subject we call the attention of our readers to a special, recently sent broadcast over the country from Boston, Mass., which bears out the views reported by our correspondent. The dispatch is herewith given:

"The life-preservers used on the lost steamer Portland were of about as much use to the passengers as belts of lead. Some of those washed upon Cape Cod were filled with granulated cork. More wore a thin fabric, holding together a number of bunches of a coarse reed, or grass, like that used for covering champagne bottles. This reed, once wet through, was destitute of buoyancy."

This is a horrible charge to make against the manufacturers of the buoys, the shipchandlers who handle such inferior articles, the shipowners who accept and pay for such fraudulent goods, and, finally, the local inspectors of steam vessels whose duty it is to inspect the equipment of all steamers carrying passengers, and for that matter, cargo boats as well.

It is simply an old truism if we use the quotation: "Where there is much smoke there is likely to be some fire." And in making this applicable to life-taking instead of life-saving appliances in the form of inferior life-belts, jackets or buoys, we would ask if it is not the duty of the steamboat inspection service to exercise a more rigid examination before placing their "John Hancock" at the foot of an inspection certificate?

Our valued contemporary, Seaboard, New York, keeps life in the subject by publishing the following:

"The United States Steamboat Inspectors, at Boston, have condemned the outfit of life-preservers on the British steamer Prince Edward, plying between Boston and Yarmouth, N. S. They found they only weighed 4½ pounds, instead of 6 pounds, as the law requires. The finding of straw-filled life-preservers after the recent gale is bringing about a stringent inspection. The folly of carrying fake life-preservers is very apparent, as heavy judgment could be obtained against a steamer having them in case of an accident."

Here is a specific case, a condemnation by government officers of inferior life-takers, inferior, because the lack of 1½ pounds of cork is an aggravation, in not taking life quick enough; a tantalizer, in place of a preserver. Who, in all these glorious United States, is going to sift this matter to the bottom and enter action against the possible or probable life-destroyers? Were these safety prevaricators manufactured in ignorance, fraudulently, or in good faith? Who supplied them to the ship, and how was she charged for them; and last, but by no means least, had they ever passed a previous government inspection, where and by whom?

The inspection service should not let this matter rest just where it is. Seaboard remarks that it is folly to carry fake life-preservers. It is a thousand times worse than folly—it is murderous, though, that heavy judgment could be obtained against a steamer having them in case of an accident, is problematical. The life-preservers being bought as standard goods, and certified to as being adequate life continuers by a government inspection board, it would certainly be an open question regarding the ship's culpability in the premises, though there can be no question about the right to prosecute some one in the matter, but who? Well, perhaps the United States Board of Supervising Inspectors of Steam Vessels may determine the proper method of action to pursue, when in convention assembled at their next annual meeting, to be held a few weeks hence.

THE New York Maritime Register is one of our most valued exchanges. It has also a universal circulation in the full acceptance of the term. The columns of the Maritime Register are relied on by the English speaking sailing community and others throughout the world, or rather at all seaports. We have conned its columns as familiarly in Nagasaki or Hong Kong as we have in London, San Francisco or Monte Video. Therefore, and for the kind remembrances we bear towards it, as well as for present friendship's sake, we don't like to see it misled even in its credited quotations. In its issue of December 21, we find the following as an introductory to a more extended article, all duly credited to a lake journal: "The powerful towing steamer Robert W. Wilmot, now being built by the Globe Iron Works Co., of Cleveland, for W. G. Wilmot & Co., the well known contractors of New Orleans, is reported to be the finest craft of her class in business." We take this opportunity of calling the attention of the Maritime Register to the fact that the tug Robert W. Wilmot left the yards of the Globe Iron Works Co., Cleveland, and also the port of Cleveland, fully completed and equipped, on October 15, or upwards of three months ago. Nor is there any tonnage under construction at the present time at the extensive shipyards of the Globe Iron Works Co. which could or might by any probability be confounded with the large and powerful tug Wilmot; that vessel as we have said, having left the stocks several months ago.

THE day is not yet at hand when the steamship companies render an account publicly of their past year's management. Iron ore companies, insurance offices and others are equally reticent. Shipyards, dry-dock companies, engine works, boiler shops, ship chandlery stores, etc., in which a large number of stockholders are interested, meet with closed doors, and the reading public, or in many instances the minority interests of shareholders are but little considered. In the near future we hope to see the widest publicity given to annual balance sheets and close corporations or syndicates become the unique exceptional.

THE thanks of the RECORD are due to the U. S. Engineer officials in charge of the traffic and commercial statistics at the Sault Ste. Marie Falls canal. We take this opportunity of acknowledging the courtesy of the officer in charge in sending the RECORD prompt and accurate returns of the traffic each month during the season of navigation, and more especially in this issue, for complete traffic statistics for the past year with a comparative report for the year previous.



SLIGHT wonder that so many lake vessels are abandoned to the underwriters in the first stages of trouble through strandings, collisions in shoal water, groundings, fire, etc. The knowledge or information is general and the saying is pat—that the underwriters pay the bills anyway. What inducement beyond the bare conscientious element of duty is held out to the sailing fraternity to risk life and limb or future health in their efforts to save anything for the interests of all concerned. Ordinarily, the seaman feels and would swear that when he leaves her, or makes a total abandonment of his vessel, no one else should ever put a foot aboard of her. Such, however, has not been the mode or code observed on the lakes within the last few years, hence, the underwriters' agents have been compelled to take charge, assume that portion of the masters' duties, engage pumps, divers, lighters, steam, etc., in their endeavors to save at least a portion of the whole. This change from former methods in vogue on the lakes has no doubt been brought about through the mean, picayunish, short-sighted and grasping policy of some of the insurance premium grabbers, we had almost said in accordance with the orders of selfish underwriters, but such a sentence would be hardly applicable, for the most selfish dollar-hunting underwriter would always sacrifice a sprat to catch a mackerel, or in other words, let go of one dollar to save one hundred. The generation of masters and officers now springing up to take charge of the iron and steel tonnage of the lakes should be tarred with the brush used by their progenitors, or infused with a little of the spirit of "Never Give up the Ship," which was found such an admirable stand-by in former days.

ALMOST every underwriter in the world recognizes and is fully alive to the fact that one of the best ways to minimize the loss of floating property is to suitably and adequately acknowledge their indebtedness to those who actively exhibit discretion, zeal, technical skill and ability, as well as extraordinary efforts in behalf of values placed in jeopardy. The due appreciation of even one man's well directed efforts towards saving property calls for a corresponding quota of skill and circumspection on the part of others who may at some time be similarly circumstanced. A proper award being duly credited, establishes a corps de esprit, or in other words a spirit of emulation among the entire marine community, from the flatfoot, that is, the fresh or salt water laborer, all the way through to the most valuable, best equipped and extensive wrecking, towing and salvage plant or outfit extant. Lake seamen, also ordinary labor, engaged in salvage operations, is recognized by underwriters or their general agents to the extent of a few cents an hour over that of common labor on shore and there the distinction ends. Let a new era be started, an innovation indulged in if you please, so that those who are, or may become entitled to an honorary distinction or merited award, might meet with their just deserts at the hands of otherwise appreciative interests, viz: those who underwrite the risks on ship, freight and cargo, or on hull and freight, if such be the better understood, because the most popular lake terms.

#### WORK AT THE YARDS OF THE AMERICAN STEEL BARGE COMPANY.

There is now greater activity at the yards of the American Steel Barge Company, West Superior, Wis., than there has been for several winters past.

The yards will employ about 1,000 men from now until June. The company has already two good sized boats to build. On the east side is the oil barge being built for the Standard Oil Company. Two boats of this class were built a couple of winters ago and this is one of almost the same description as the former two. She is 210 feet in length. Work was started upon her about a month ago and is now progressing rapidly, and all the frames are in position.

The company has also the contract for a large whaleback barge for the Bessemer Steamship Company. This boat is to be 460 feet in length and she will be the largest carrying barge on the Great Lakes. The keel blocks are laid and what material has arrived is being got in shape. The company gets its material from the Carnegie and Illinois Steel Companies and both these firms are behind in their orders.

Besides building these two boats the company has a good deal of repairing work to do. The Arthur Orr is in dock at present and will keep a force of men at work for some time to come. Should she be completed before spring, the ice will probably be sawed out and the Tampa put in her place. Besides these the steamer Gilbert and barges 129 and 115 are on hand for repairs.

#### NAVAL AND MERCHANT MARINE.

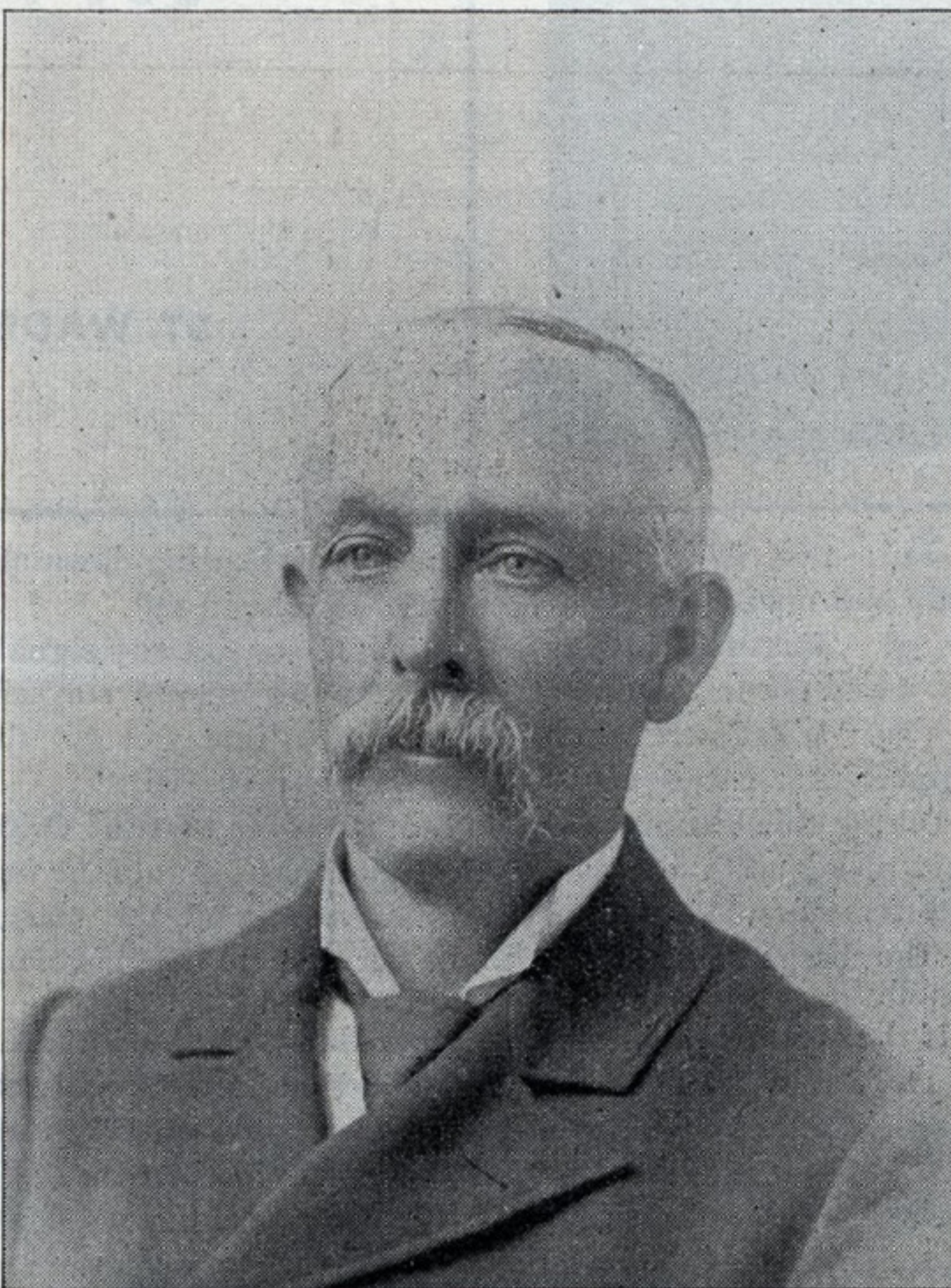
That was a notable epigram, uttered by Joseph H. Choate at the dinner of the alumni of New York University: "If we are to have a great navy to defend our commerce, we should have a great commerce to defend." The development of our merchant marine will be a logical result of our success in war, of our expansion in territory, of our new foothold in the far east, and of the growing increase of our exports over our imports. We want more ships with guns and more ships with cargoes; and we want both kinds of ships to fly the American flag.

#### CAPT. G. F. BABCOCK.

Capt. Geo. F. Babcock, keeper of the Fairport life-saving station, lifted his ground tackle and stood away for the other shore on Wednesday. The main cause of his sudden departure was through a hemorrhage of the lungs, and, although he had been ailing for some little time there was no suspicion that his illness would prove fatal.

Capt. Babcock was born in Fairport, Ohio, December 20, 1845, and his first life-saving work was done fifteen and a half years later when he was one of a volunteer crew that put out from Fairport to a vessel in distress.

On July 10, 1871, he was appointed light-keeper at Fairport, which position he held for seven years. In 1876 a life-saving station was established and he was appointed keeper, with instructions to organize a volunteer crew. He continued for two years holding both offices, until 1878,



The Late Capt. George F. Babcock.

when a paid life-saving crew was shipped for the Fairport station, at which time he gave up his light-house duties and devoted all his time to the life-saving service.

From the foregoing record it may be seen that Capt. Babcock spent 28 years in the service of the government, 23 years of which has been in the life-saving service.

Capt. Babcock, was highly respected and had many friends among the sailing fraternity, the government employes, and was generally well liked among those with whom he was brought into contact. The RECORD also loses an old time friend through the change of moorings of Capt. Babcock.

#### NEW DOCK AT TWO HARBORS.

The Duluth & Iron Range road has closed a contract for rebuilding ore dock No. 1 at Two Harbors. The dock must be completed by May 1.

The contract awarded is for the timber work only and does not include the metal spouts or the dredging. The rebuilt dock No. 1 will be as large as the dock No. 2, which the Barrett & Record Co. rebuilt last winter, lacking eight pockets. The improvement will give the road facilities for handling 3,500,000 tons of ore next season.

The new dock will contain 20 pockets. It is to be 49 feet wide and 59 feet 6 inches high, and 1,400 feet long, including the end crib, the dock proper being 1,350 feet long. The capacity of the dock will be 40,000 tons, 22,000 tons more than the present dock holds.

#### FLOTSAM, JETSAM AND LAGAN.

An all-rail shipment of 50,000 bushels of wheat was made from Duluth on Friday last.

One-twelfth of the steamer Omaha has been purchased for \$4,000, or at the rate of \$48,000 for the boat.

Capt. Singer, of Duluth, has been asked to look at the steamer Harlem and see if he believes it possible to release her.

Proposals for 12,000 barrels of cement to be used in the construction of the new piers at the Duluth ship canal will be opened at the office of Maj. Sears, in Duluth, on January 10.

The new steamer Hamilton, building at Roach's yard, Chester, for the Old Dominion Line, will be launched before the year is out and her sister ship, the Jefferson, will be off the ways a month or two later.

The steamers McDougall, Yuma, W. H. Gilbert, Arthur Orr and Tampa and two whaleback barges are the only cargo boats wintering at Duluth. The Tampa and Orr are two "lame ducks" and can not load unless about \$100,000 is spent on them first.

The insurance companies are highly pleased with Capt. Singer's success in bringing the Tampa into port, after being piled up on the rocks of Beaver Bay, and it is just possible that it may result in the establishment of a permanent wrecking crew at the head of the lakes.

Capt. Ernest Walton, steamer City of Parry Sound, hauled alongside of, and engaged as a life consort this week a craft showing her numbers as follows: Miss A. Reynolds. The usual preliminaries being entered into with a sky pilot as a witness the consort sheered off under a safe convoy. Happy and prosperous voyage!

The steamer Wisconsin, which has been at Ferrysburg, Mich., for two months to have her steel work extended to the promenade deck, as well as to receive two new boilers and extensive changes in her cabin, etc., it is now thought will be ready to resume her place in the Grand Haven line soon after the 1st of January. About \$25,000 is being expended upon the improvements.

A class journal published in Cleveland informs us one week that the Peninsular and Oriental Steamship Co. is the largest in the world. In the next issue it purloined a table that was printed in London Fairplay, showing that the P. & O. Co. stood only fourth on the list of the largest owners of the world's steam tonnage. It don't matter, though, for the RECORD straightened the thing up for its readers last week.

We have heard of the steel in a lady passenger's corsets deflecting the compass needle every time she visited the wheelhouse, and it was said that she paid frequent and lengthy visits to that secluded, soul-edifying spot on board of lake vessels. Now word comes from New York that a noted Lake Erie wheelman and pilot has been herring-boning the lakes, figuring out his own name in a vessel's wake and casting away steamers through the steel springs in his wooden leg.

The season of navigation this year was opened at the head of the lakes from the lower lakes. The steamer City of Paris was the first boat to arrive at Duluth on April 10, though the Harlem is credited by some with this distinction, as she arrived at practically the same time with the City of Paris. The first boat to clear from the head of the lakes was the Wilson liner W. D. Rees, leaving April 10, or on the day of the first arrivals. The entire season lasted 239 days, four days longer than last year.

Major Symons, the government engineer in charge at Buffalo, has lately favored the use of electric sirens in place of the steam fog horns. The major does not favor electricity for light-houses, however. He says that kerosene is so cheap and the chances of an electric current getting out of order, added to the difficulty of obtaining it at all as a rule, are sufficient to prevent its general use. He knows but one light-house in the country that uses electricity, and that is in a rocky district on the Jersey coast, below Sandy Hook.

A superstitious naval officer has called attention to the fact that the Massachusetts is the third vessel of the navy whose name commences with "M" that has met with an accident off Governor's Island since the war began. The others are the Mayflower and the Montgomery. The Maine is pointed to as another unlucky ship with that initial. There are just thirteen naval vessels now in commission with "M" as the first letter of their names, and—a clincher!—there are just thirteen letters in the name Massachusetts.

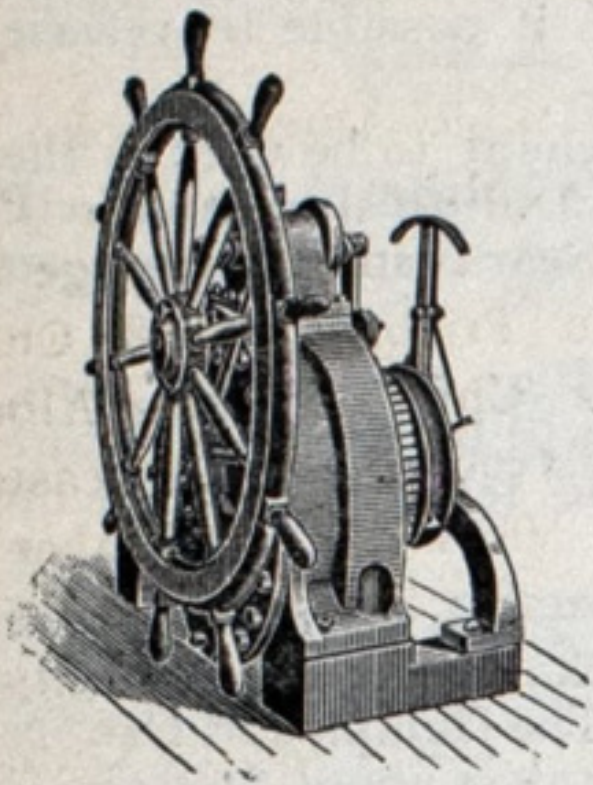
#### MORE LAKE SHIPBUILDING CONTRACTS.

The past few days has developed two contracts for lake-built tonnage, one for a steel steamer to be built by the Cleveland Ship Building Co., of the following dimensions and machinery particulars: 257 feet over all, 238 feet keel, 42 feet beam and 26½ feet deep, engines triple expansion, cylinders 18½, 31½ and 52 inches with 36 inch stroke; boilers, two Scotch type, 11 feet in diameter and 12 feet long, to be allowed 170 pounds of steam. The steamer will have steel deckhouses and spars, to cost about \$120,000. According to the contract the steamer is to be completed and ready for business May 15, 1899. The managing owner is Mr. W. A. Hawgood, Cleveland.

The second contract has been placed with the Union Dry Dock Co., Buffalo, for a 5,000 ton steel steamer to cost about \$200,000, built to the order of the Western Transit Co., Buffalo. It had been a foregone conclusion that this contract would have been placed with the Detroit Dry Dock Co., and there must have been "a hole in the skimmer" somewhere or it would have been.



## Queen City Patent Hydraulic Steerer.



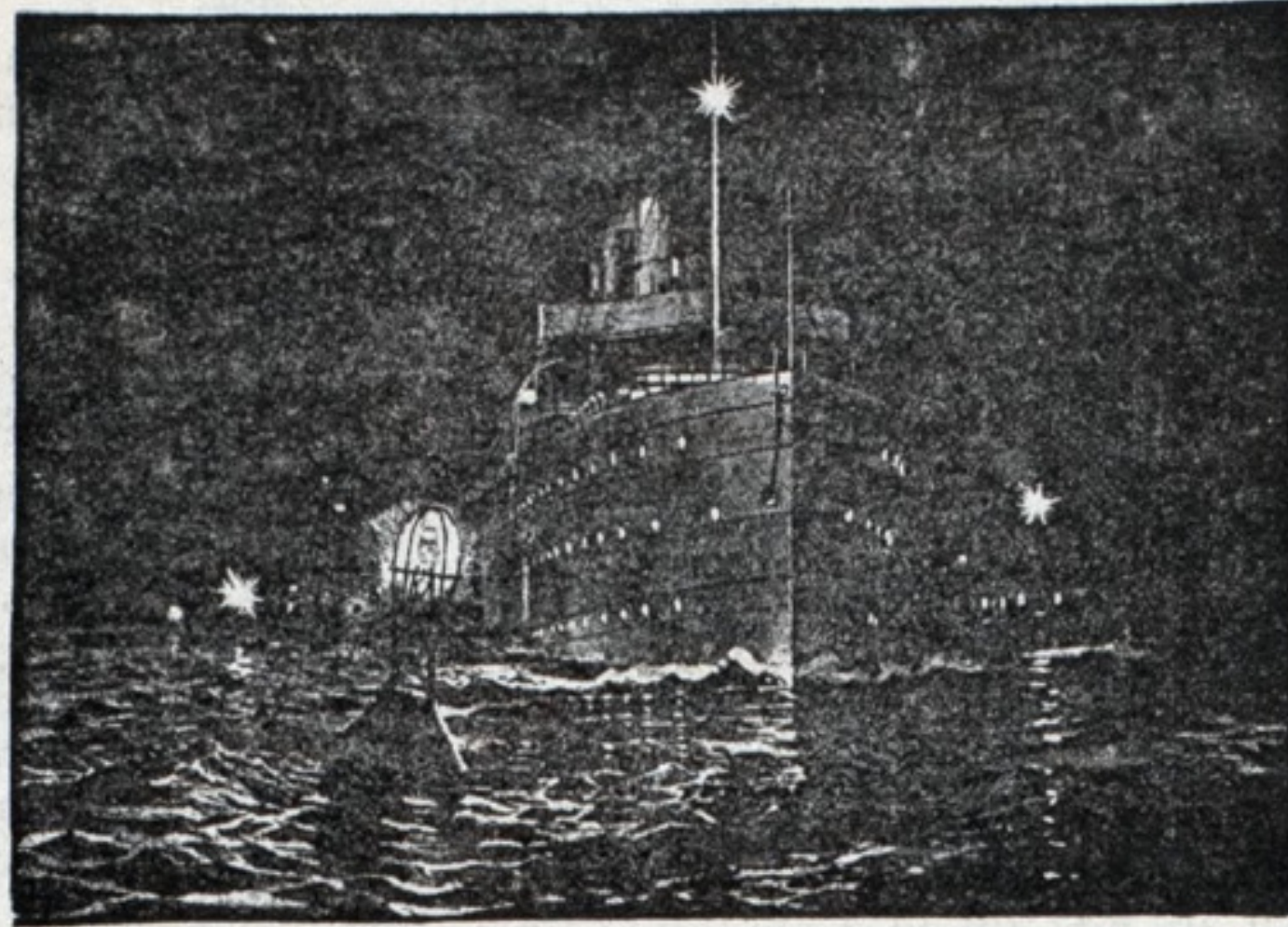
The best and most reliable  
Generates no heat in pilot house.  
Has large hand wheel.  
Can be changed from power to hand steering instantly.  
A favorite with pilots.

Send for References.

Queen City Engineering Co.  
BUFFALO, N. Y.

## Pintsch Gas Lighted Buoys.

Adopted by the English, German, French, Russian, Italian, and United States Light-House Departments for channel and harbor lighting. Over 800 gas buoys and gas beacons in service.



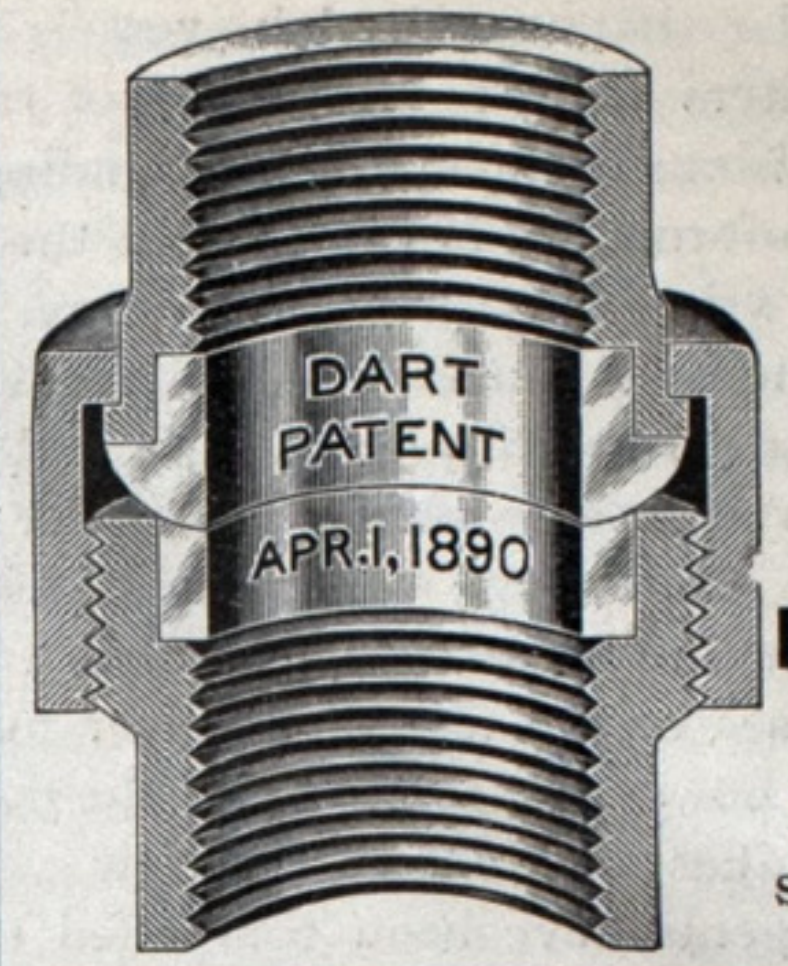
### Burn Continuously

from 80 to 365 days and nights without attention, and can be seen a distance of six miles.

Controlled by

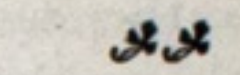
THE SAFETY CAR HEATING AND LIGHTING CO.

160 Broadway, New York City.



## The Best Union

Made in the U. S.



Mnf'd by the  
E. M. Dart  
Mfg. Co.

Providence R. I.  
Send for circulars and prices.

## Steamers and Tugs

WANTING COAL

will always find a supply at Geo. N. Carleton's large, new coal dock at East Tawas. The best quality Pennsylvania and Ohio coal supplied night or day. Depth of water at dock, 15 feet.

## Almy's Patent Sectional WATER TUBE BOILERS.

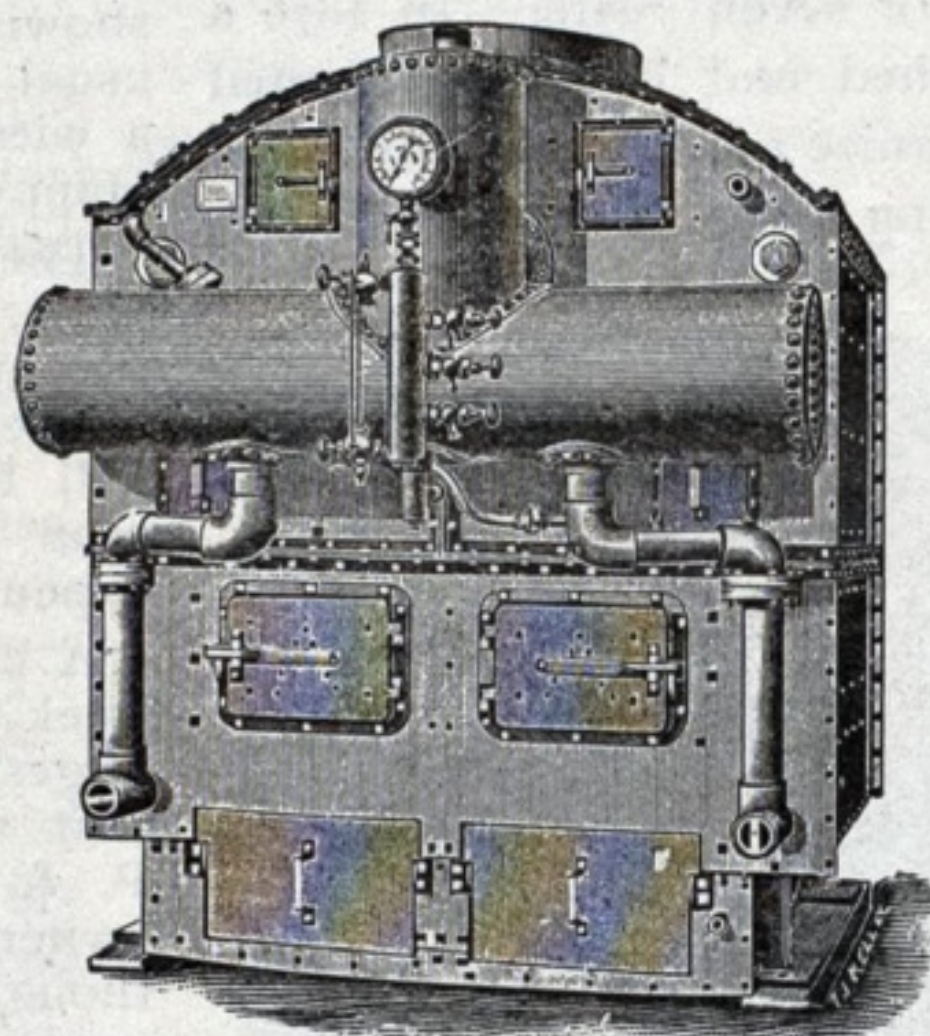
NOW USED IN

21 Passenger Boats from 70 to 160 ft. long.  
61 Steam Yachts from 50 to 180 ft. long.

U. S. TORPEDO BOAT "STILETTO."

Numerous freight and fishing steamers, launches and stationary boilers are giving most excellent results.

ALMY WATER TUBE BOILER CO.,  
178-184 Allens Ave., near Rhodes St., PROVIDENCE, R. I.



## W. A. McGILLIS & Co.

DREDGING.

57 WADE BUILDING. CLEVELAND, OHIO.

### MARITIME LAW.

DONNELL, VS. BOSTON TOWBOAT CO.—BOSTON TOWBOAT CO.  
VS. DONNELL.

(Circuit Court of Appeals. First Circuit, October 4, 1898).  
(Continued from last week).

But conceding that, after entering the fog, the steamer in this case could not have slowed down with safety to herself and her tow, the evidence shows that she saw the fog bank approaching at least some minutes before it enveloped her, and that she made no movement towards lessening her speed during this time. Knowing that she could not immediately slow down after entering the fog, the steamer was at fault in not giving her signal to the barge, and commencing to slow down as soon as she saw the fog. That the steamer did not take this precaution, we think, is made clear from the following testimony:

The master of the steamer testifies as follows:

"Q. 53. Now, was that a gradual fog—did it come on gradually, or not? A. No; we shot right into it, or it came onto us. Well, I can't say. It was probably five or six minutes. I don't know as it was more than that, that we could see it. Q. 54. You could see it five or six minutes before you came into it? A. Yes, sir. \* \* \* Q. 91. And what was the first thing you did after the fog shut in? A. The first thing I did was to blow to take in sail on the barge. Q. 92. What signal did you give for that? A. Two long and two short. \* \* \* Q. 95. Is that your usual course of proceeding when fog shuts down? A. Yes, sir; at once; just as soon as the fog sets in I blow to take in sail."

Linscott, the second mate of the steamer, on watch at the time of the collision, testifies:

"Q. 23. Now, after the fog came up, and after you had begun to give your regular fog signals, did you give any other signal? A. Not until we heard these fog horns. Oh, yes, we did; we signaled to the barge, as soon as the fog shut in, to shorten sail. \* \* \* Q. 29. How long after the fog shut in was it that you gave the signal to the barge? A. Well, it was about as soon as the captain could blow the whistle,—as soon as the fog closed in. The first thing that was done was to give the signal."

The master of the tug testifies:

"Q. 35. Now, after the fog shut in, what did you do first? Did you get any signal from the steamer? A. I started hauling down my sails before he signaled me to take

in sail; and, while I was in the act of hauling down my main and mizzen staysail, he blew to take in sail. \* \* \*

Q. 38. What sail had you got in before you got any signal?

A. I had got in the main staysail and the mizzen staysail.

Q. 39. What were you taking in at the time you got the signal? A. I was just taking in the main staysail."

Taking this testimony altogether, it proves that the Orion gave no signal to take in sail until after she ran into the fog, and that she was so dilatory in this respect that the master of the barge began to take in sail before she gave any signal.

If the steamer maintains the proposition, on the authority of *The Syracuse*, *The Alleghany*, and *The Lord Bangor*, ubi supra, that it was impossible to slow down quickly after entering the fog, on account of danger to the barge, this leaves the burden resting on her to show that she could not have commenced slowing down before running into the fog. This she not only fails to do, but the evidence on this point is clearly against her. It is unnecessary to examine any other of the alleged faults on the part of the steamer.

We will next consider the question whether the schooner was at fault in changing her course by porting her wheel after the signal of the steamer was heard ahead. This was not a case of in extremis. The libel states that it was in order to give "the said steamer and tow plenty of room." The answer states that the schooner's fog signals seemed to bear about three points on the starboard bow of the steamer, and that the master of the steamer ordered her helm to be put to starboard, which was done, and he gave two short blasts of his whistle to indicate that he was directing his course to port, and, within two or three seconds later, he signaled the barge to starboard. This allegation is supported by the testimony, and it shows that, in order to give the schooner a margin, the master of the steamer put her bow to port, and signaled the barge to do the same, which he had a right to do, having at the same time a right to assume that the schooner would hold her course. The schooner, however, put her bow to the starboard, thus neutralizing, in part at least, the efforts of the steamer to give her more room.

The schooner claims that the place where the collision occurred was a "narrow channel," within article 21, and that, therefore, the steamer was bound to keep on her starboard side of the fairway; that the schooner was justified in assuming she would do so, and was consequently justified in porting her helm, and going on her own starboard side of

the channel, in order to give the steamer more fairway. But there is no evidence to support the position that the width of the Vineyard Sound at the place of collision was a "narrow channel." The testimony of the captain of the *Orion*, and the chart, point to the contrary. It appears that the sound in this locality has a navigable width of about six miles. A steamer has a right to rely on a sailing vessel keeping her course. *The Illinois*, 103 U. S. 298; *The Martello*, 39 Fed. 505; *The Allianca*, Id. 476. The burden is on the schooner to prove, not only that her change of course did not contribute to the collision, but that it could not have done so. *The Pennsylvania*, 19 Wall. 125, 136; *Richelieu & O. Nav. Co. v. Boston Marine Insurance Co.*, 136 U. S. 408, 422, 10 Sup. Ct. 934; *Belden v. Chase*, 150 U. S. 674, 699, 14 Sup. Ct. 264; *The Martello*, 153 U. S. 64, 74, 14 Sup. Ct. 723; *The Fanny M. Carvill*, 13 App. Cas. 454, 455, note; *The Duke of Buccleuch*, 15 Prob. Div. 86 [1891] App. Cas. 310.

It is assumed on the part of the schooner that the learned judge of the district court found that the barge was at fault, as well as the *Orion*. This does not necessarily follow from the expression used by the court in its opinion: "The *Orion* and her tow were at fault for this collision." This was a libel in personam against the owner of the *Orion*, who was also the owner of the tow. By this expression the court may have had in mind joint ownership, rather than the idea that both vessels were at fault. In the same paragraph the court only specifies the fault of the steamer. The libel alleges "that the said collision and the damage resulting therefrom were caused wholly by the fault of those on board the said steamship *Orion*, and those in charge of her." It then specifies certain faults, all of which attach to the steamship, and none to the barge. This was not merely a general allegation, which left open an opportunity for proving the barge was in fault, but it expressly excluded the barge. The schooner is not at liberty to claim on this appeal that the barge was at fault, in view of the specific and positive allegations of the libel, and in the absence from the record of anything in the nature of a waiver on the part of the defendant. Under these circumstances, the proposition of the schooner that, there being three vessels in fault, the damages should be divided into three parts, cannot be considered. The decree of the district court is affirmed, without additional interest and without costs to either party in this court.



## TONNAGE.

In a recent case of liability for collision whereby the British marine laws allow a maximum claim of £15 (\$75) per ton where loss of life or personal injuries have been sustained and £8 (\$40) per ton where mere damage to property has occurred, provided there was no personal negligence on the part of the defendant. The court before whom the case was tried, turning to the British statutes which deal with the "tonnage" or "burden" of vessels, went back over 200 years and showed that till comparatively recently the words "tonnage" and "burden" were not only used indifferently, but were practically the same thing, until the craft of the ship builder enabled him to take advantage of the measurement laws so as to combine a great deadweight capacity with a low net register tonnage. So the court held that in regard to registration the words "tonnage" and "burden" were still synonymous, and that a vessel of under 15 tons "burden" mean a vessel of under 15 tons register.

The number of different ways of describing a ship's size are becoming bewildering. Largest of all comes her loaded displacement, the figure given in the case of naval vessels. Second, we have the dead weight capacity, which in modern cargo boats greatly exceeds the gross tonnage. Then there is this tonnage ascertained for limitation of liability purposes, and for nothing else. Fifth comes the under deck tonnage, and sixth the net register, which is, of course, as small as modern science can make it.

## LAKE FRONT OWNERSHIP SETTLED.

The Supreme Court of the State of Illinois has just handed down a decision declaring that riparian owners along the shores of Lake Michigan have no right to build wharves, docks or piers out into the submerged shallows, without license from the State authorities, and that the State, holding the submerged lands in trust for the people, would be false to its trust should it permit shore owners to encroach on the public domain.

The decision takes precedence over the United States Supreme Court's decision regarding the Illinois Central Railroad Company's cars, and leaves the way clear for the State of Illinois to proceed at once against the company, to reclaim for the State all the docks and wharves that the corporation has built out into the lake, according to the opinion of the national tribunal.

## IS THIS A WRECKER'S PRIVILEGE?

It has been reported from Buffalo that of the copper cargo of the Arthur Orr, which was stranded at Baptism river north shore of Lake Superior, on November 22nd, later released and taken to Duluth, 35 bars are missing, since which time we have heard no further report. These bars are valued at about \$1,400. The consignment of copper was

taken from the Orr while she was stranded at Baptism river and put on the lighter Noyes, which was used by the wrecking crew of the Singer Tug line. The copper was not checked on to the Noyes, as such work was impossible. After the Noyes reached Duluth she was left laden, but unguarded at the dock for two days and two nights. If the missing copper was stolen it is considered likely that it was stolen while the Noyes was lying at the dock. It is considered more likely, however, that the loss of the bars occurred during the storm in which the Orr was wrecked. Copper bars are very heavy and could not be easily purloined.

The copper, after reaching Duluth, was taken from the Noyes and warehoused. It was afterwards checked out of the warehouse on to the North Wind and taken to Buffalo where the shortage was noticed.

## BIDS ON HARBOR WORK.

Abstract of proposals received at Duluth, Minn., for revetment work, Portage Lake ship canals, Michigan; opened December 20, 1898, by Major Clinton B. Sears, Corps of Engineers, U. S. A.:

Amount proposed to be expended on this work, about \$60,000.00

Number of Bids.	NAME AND ADDRESS OF BIDDER.	For Pile Revet- ment, 8,000 Feet.	For Special Pile Revetment, 230 Feet.	For Protection Work, 300 Feet.	For Repair Work, etc., in Cut 1, 17,000 Feet B. M., Per 1,000 Feet B. M.	Total.
		Per Lineal Foot Completed Work.				
1.	Fitzgerald & Norris, Duluth, Minn.....	\$6 81	\$9 37	\$4 10	\$50 00	\$58 715 10
2.	Edward Gillen, Racine, Wis. ....	10 25	7 16	13 16	58 00	88,580 80
3.	Powell & Mitchell, Marquette Mich...	7 58	10 50	4 00	55 00	65,100 00
4.	Frank Campbell, Duluth, Minn ....	8 00	10 20	4 00	57 00	68,785 00
5.	John M. Borgman, Kewaunee, Wis ...	8 80	12 30	6 70	94 30	76,842 10
6.	Frederick Davis, Duluth, Minn.....	7 68	10 33	3 91	46 73	65,783 31
7.	Frank P. Tims, West Duluth, Minn.	7 00	10 00	4 00	50 00	60,350 00

Bid No. 1, sent in by Messrs. Fitzgerald & Norris, Duluth, Minn., is the lowest and will be recommended to the Chief of Engineers, Washington, D. C., by Major Sears for acceptance in due course.

It is rumored that the Hartford and New York Transportation Co. will build a new steamer to replace the Hartford, which has just been sold to the U. S. government. The Hartford is a fast twin-screw boat built in 1892.

## NAVAL RETIREMENTS, 1899.

The following retirements, on account of age, will take place in the U. S. Navy during the year 1899:

February 10, Chief Engineer George J. Burnap; February 10, Mate Charles Wilson; March 17, Boatswain William Manning; March 25, Chief Engineer William G. Buehler; April 7, Medical Director George A. Bright; April 9, Pay Director Rufus Parks; April 16, Medical Director John H. Clark; May 2, Boatswain Charles Miller; May 5, Pay Director Edwin Stewart; May 7, Pay Inspector George W. Beaman; May 22, Professor Edgar Frisby; July 8, Chief Engineer James Entwistle; July 11, Chief Engineer Albert C. Engard; August 5, Naval Constructor Joseph Feaster; August 29, Boatswain Charles E. Hawkins; September 1, Pay Director Joseph A. Smith; September 15, Paymaster Wm. W. Barry; September 25, Chief Engineer Joseph Trilley; September 26, Mate William Jenney; December 10, Gunner George Fouse; December 14, Chief Engineer Charles J. MacConnell; December 15, Boatswain William A. Cooper; December 17, Professor William Harkness; December 17, Gunner Robert Sommers; December 23, Pay Director George A. Lyon; December 26, Rear Admiral George Dewey.

## LUMBER CUT AT THE HEAD OF THE LAKES.

The News-Tribune figures the total cut of the saw mills in Superior-Duluth harbor, for the season of 1898, at 323,930,000 feet and it is the banner year for the industry at the head of the lakes as far as production is concerned. The largest aggregate cut of these mills in any preceding year was in 1895, when it amounted to 293,594,000 feet. The cut for the season of 1896 was 183,050,000 feet and for 1897, 289,585,000 feet. The cut for the season of 1898 was therefore greater than the banner year of 1895 by over 30,000,000 feet.

There are other good features to the situation. This year there was 113,000,000 feet of lumber on the docks December 1, whereas there were 184,454,000 feet on dock on the same date in 1895. Of the lumber on dock at present only 69,000,000 feet is unsold, whereas in 1895 at the beginning of winter there was very little if any sold.

## A HANDSOME CALENDAR.

The handsomest illustrated calendar yet to hand at this office is the one issued by John T. Solon, Chamber of Commerce, Toledo, O. Out of pure friendship for Mr. Solon we refrain from giving a description of this work of art. We know, if Mr. Solon doesn't, that if we but done scant justice to his taste for 1899, he would be inundated with requests for a copy of his art gallery.

THE four-masted steel ship Arthur Sewall, now building at Bath, Me., is the only sailing ship now under construction in American yards.

# TOBIN BRONZE

(Trade-Mark Registered.)

Tensile strength of plates one-quarter inch thick, upward of 78,000 lbs. per square inch. Torsional strength equal to the best machinery steel. Non-corrosive in sea water. Can be forged at cherry red heat. Round, Square and Hexagon Bars for Bolt Forgings, Pump Piston Rods, Yacht Shaftings, etc. Rolled Sheets and Plates for Pump Linings and Condenser Tube Sheets, Centerboards, Fin Keels and Rudders.

## The Ansonia Brass & Copper Co.

SOLE MANUFACTURERS,

Send for Pamphlet.

19-21 Cliff St., NEW YORK.

# S.F. HODGE & CO.

MARINE ENGINES,  
PROPELLER WHEELS,  
DECK HOISTERS,  
MARINE REPAIRS.  
312 ATWATER STREET,  
DETROIT, MICH.

## Chas. E. & W. F. Peck,

58 William Street, New York City.

Royal Insurance Building, Chicago, Ill.

C. T. BOWRING & CO.

5 and 6 Billiter Avenue, E. C.,

London, England.

## Insurance

BROWN & CO., - - - 202 Main Street, Buffalo, N. Y.  
PARKER & MILLEN, 15 Atwater Street, W., Detroit, Mich.  
J. G. KEITH & CO., - 138 Rialto Building, Chicago, Ill.  
LA SALLE & CO., Board of Trade Building, Duluth, Minn.

Are prepared to make rates on all classes of Marine Insurance on the Great Lakes, both CARGOES AND HULLS.

INCORPORATED 1794.

## Insurance Company of North America

CAPITAL, Paid up in Cash, - - - - \$3,000,000.00  
ASSETS, - - - - 10,023,220.93

CHARLES PLATT, President.  
GREVILLE E. FRYER, Sec'y and Treas.

EUGENE L. ELLISON, Vice President.  
JOHN H. ATWOOD, Assistant Secretary.

T. HOUARD WRIGHT, Marine Secretary.

Lake Marine Department, GEORGE L. McCURDY, MANAGER.  
CHICAGO, ILL.

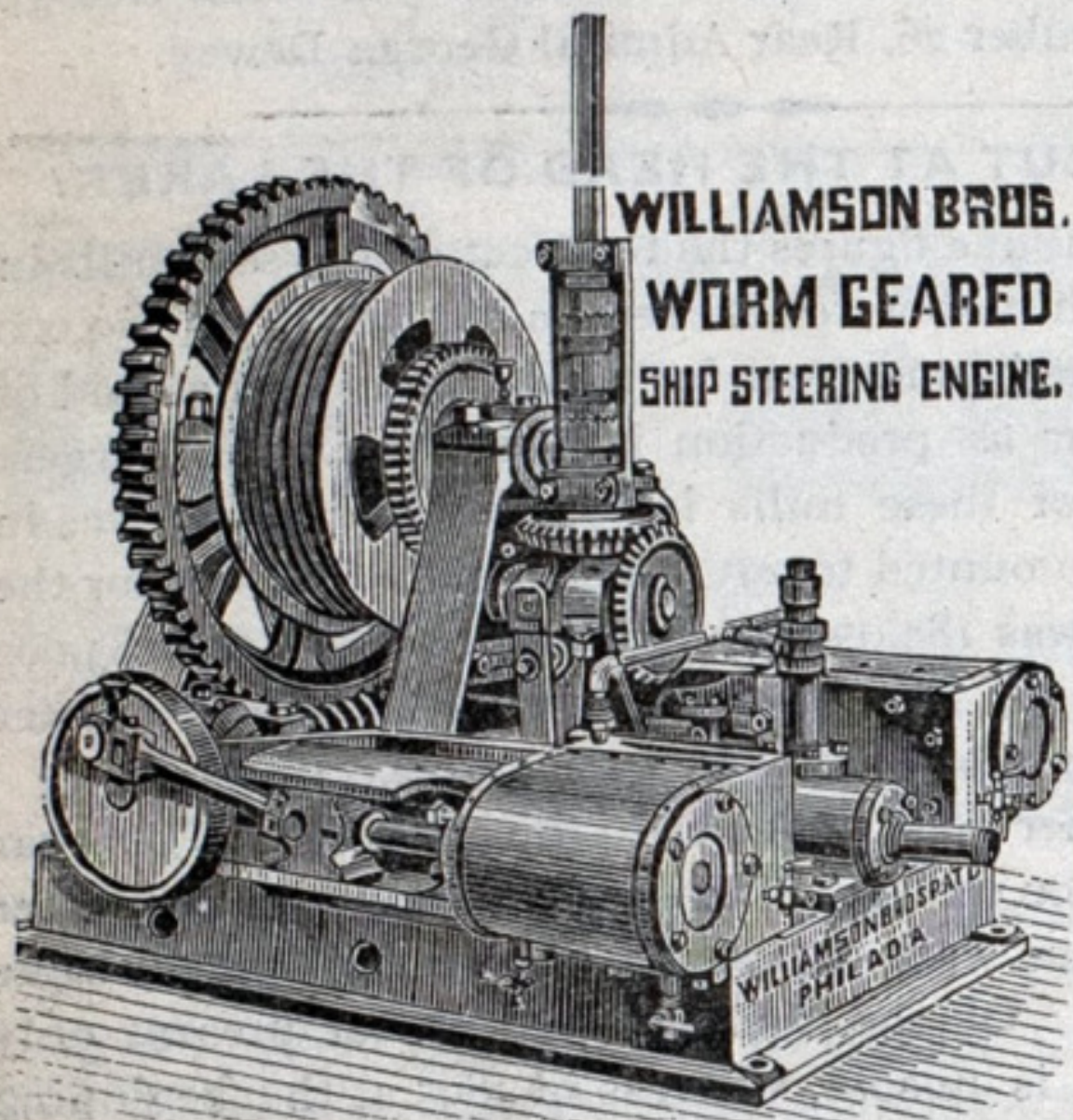


**A. J. MORSE & SON.**  
**DIVING APPARATUS**  
 140  
**CONGRESS ST. BOSTON.**



## WILLIAMSON BROS.,

COR. RICHMOND AND YORK STS.,  
Philadelphia, Pa.



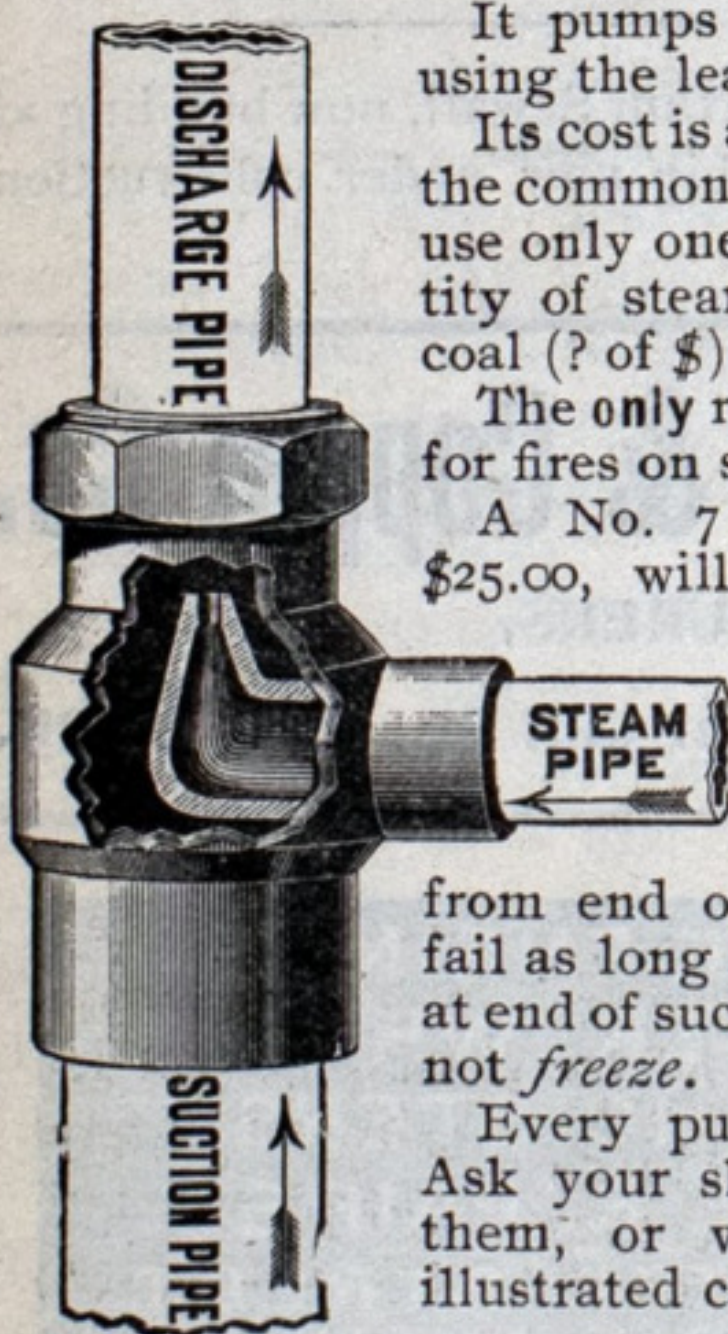
**HOISTING and SHIP ENGINES  
STEERING ENGINES.**

With either Fractional, Spur or Worm Gear of  
Various Patterns to Suit all Purposes.

Use the Vanduzen  
Steam Jet...

## PUMP

THE BEST STEAM JET PUMP IN THE WORLD.



It pumps the most water  
using the least steam.

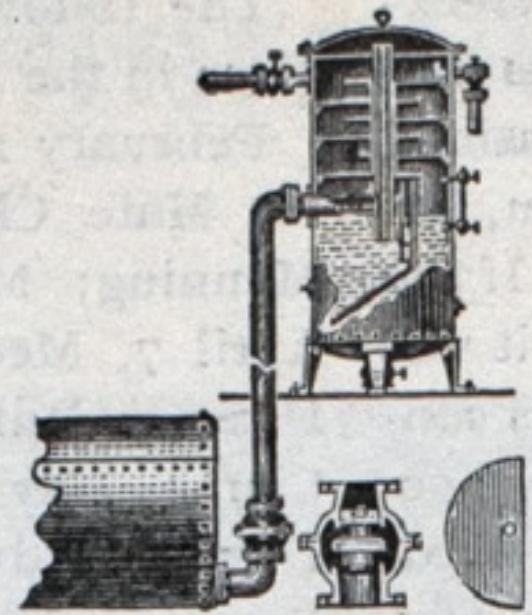
Its cost is a little more than  
the common syphon, but will  
use only one-third the quan-  
tity of steam; and it takes  
coal (? of \$) to make steam.

The only reliable Jet Pump  
for fires on steam vessels.

A No. 7 Pump, costing  
\$25.00, will force water  
through 50 feet  
of hose and  
throw a 3/4-inch  
solid stream of  
water 75 feet  
from end of nozzle without  
fail as long as there is water  
at end of suction pipe. It will  
not freeze. Has no valves.

Every pump guaranteed.  
Ask your ship chandler for  
them, or write to us for  
illustrated catalogue.

THE E. W. VANDUZEN CO., CINCINNATI, O.



## Buffalo Feed Water Heater AND PURIFIER.

Made in all Sizes and to Suit all Conditions.

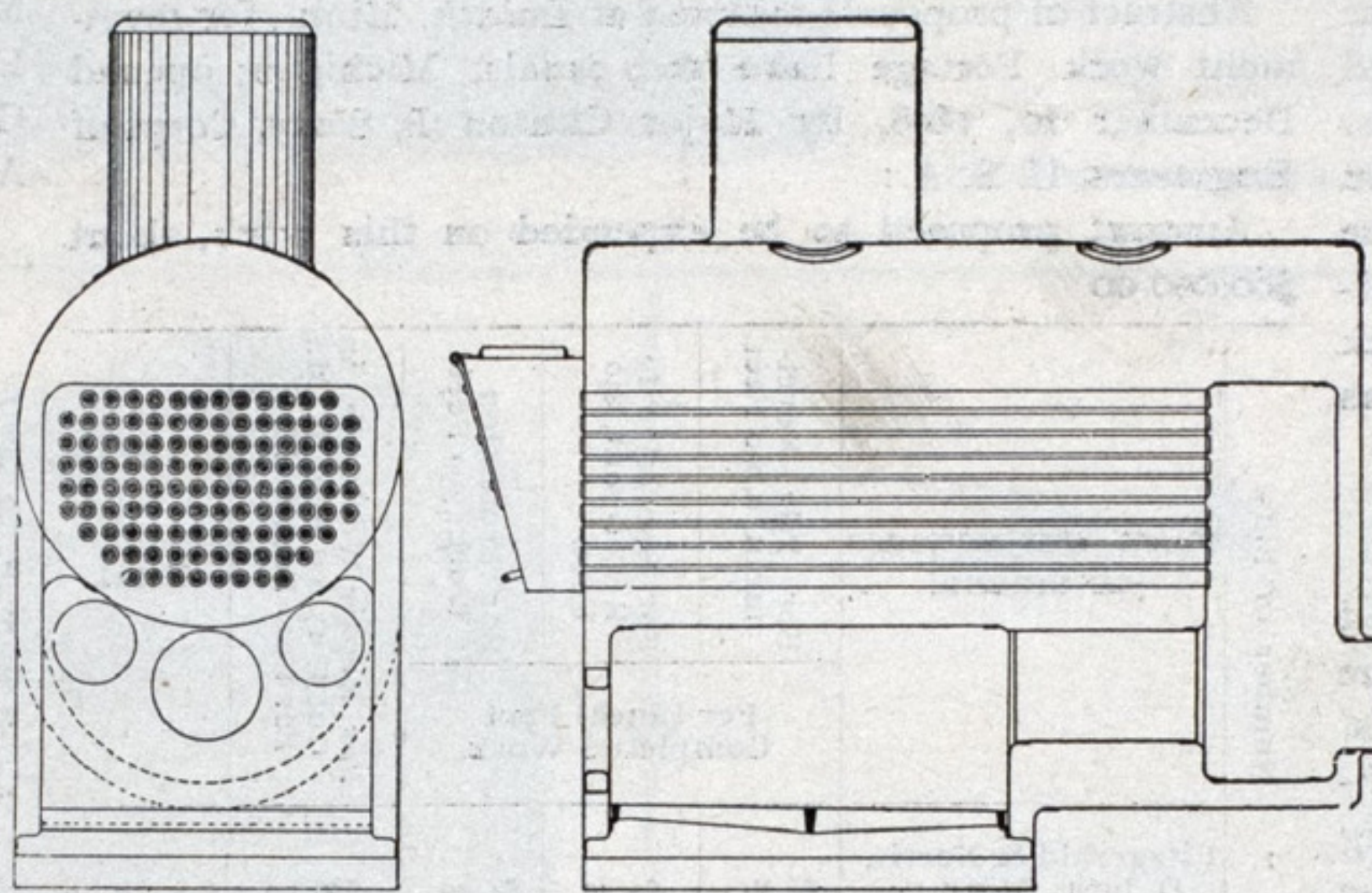
**ROBERT LEARMONTH,**

200 Bouck Ave., BUFFALO, N. Y.

Send for Catalogue.

## THE "ECLIPSE" Marine Boiler

PATENTED.



**Built by Kingsford Foundry and Machine Works,  
OSWEGO, N. Y.**

They are economical and occupy but little space.

They give perfect satisfaction.

They are easily kept clean, and the crown sheet being cylindrical in form requires no bracing.

SEND FOR DESCRIPTIVE CIRCULAR.

## Paddle Wheel Machinery

Our knowledge of river  
navigation is earned  
through long exper-  
ience and exceptional  
opportunity. We design  
and build the *entire*  
and *complete* outfits of  
driving machinery for  
powerful light draft  
vessels, having the best  
of modern shop facilities  
to aid us in doing *all*  
the work. Write to us  
before you act.

## MARINE IRON WORKS

Station A. CHICAGO.

## Maurice & Williams,

COMPASS ADJUSTERS,  
AND NAUTICAL EXPERTS.

ROOM 13,  
240 SOUTH WATER STREET.  
CHICAGO.  
PHONE, 273 MAIN.

Compasses adjusted for deviation and de-  
viation tables supplied. Great facilities for  
doing the work by day or night, in an hour  
or two.

Instruction given in Navigation and Nauti-  
cal Astronomy. Correct magnetic courses  
furnished for all parts of the lakes. Repair-  
ing of nautical instruments attended to.

## WM. WILFORD'S

**Matchless Waterproof Cloth  
and Societe Anonyme De Veluwe,  
(Japan Paint).**

**EDWARD A. BUNKER,**

Sole Agent,

20 Broad Street, New York City.

## The Cuddy-Mullen Coal Co.

Miners and  
Shippers of

## STEAM COAL

FUELING DEPARTMENT  
FACILITIES. \* \* \*

CLEVELAND HARBOR.—Car Dumper; Eight Pockets, 1000 Tons Capacity; Lighter  
Steam Derricks.

DETROIT RIVER BRANCH.—Amherstburg; Four Pockets; Three Steam Derricks  
SANDWICH—Fourteen Pockets and Two Steam Derricks.

"SOO" RIVER BRANCH.—Two Docks, (Formerly known as the Anthony and Watson  
Docks,) Equipped with Pockets and Steam Derricks.

GOOD  
COAL.

COURTEOUS  
ATTENTION

QUICK  
DISPATCH.

General Offices, Perry-Payne Bldg., Cleveland, O.

## Youghioghenny River Coal Co.

Miner and Shipper of

OCEAN,  
YOUGHIOGHENY  
GAS AND STEAM

## COAL.

General Office:

Erie, Pa. Long Distance 'Phone 409.

Shipping Docks:

Ashtabula, O. Long Distance 'Phone 76.

**VESSELS FUELED AT ALL HOURS**

ELECTRIC LIGHT.

WITH OCEAN COAL ONLY,  
BY STEAM LIGHTER OR CAR DUMP.

## THE W. L. SCOTT COMPANY,

ERIE, PA.

WHOLESALE DEALER IN

Shamokin, Wilkesbarre Anthracite,  
Youghioghenny, Mansfield, Pittsburg

**Vessel Fueling a Specialty**

by steam lighter or car dump,  
at all hours. Electric light.

MAIN OFFICE: SCOTT BLOCK. LONG DISTANCE 'PHONE 440.

FUELING OFFICE: CANAL DOCK. LONG DISTANCE 'PHONE 320.

# ...Coals